

IRREGULARITY OF EMPLOYMENT

AND

FLUCTUATIONS OF PRICES.

BY HERBERT SOMERTON FOXWELL,

PROFESSOR OF ECONOMICS, UNIVERSITY COLLEGE, LONDON; FELLOW AND

LECTURER OF ST JOHN'S COLLEGE, CAMBRIDGE.

WITH TWO DIAGRAMS.

EDINBURGH

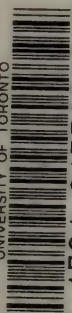
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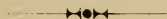
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## PREFATORY NOTE.



THE following lecture was one of a series of six, delivered in Scotland in the summer of 1886, and afterwards published in a shilling volume, under the title of "The Claims of Labour," by the Edinburgh Co-operative Printing Company Limited, Bristo Place, Edinburgh.

It is reprinted by the kind permission of James Oliphant, Esq., under whose direction the course was arranged. I have also to thank Mr Oliphant for permission to reprint his Preface to the original volume, which clearly explains the circumstances in which the lectures were delivered.

H. S. F.

CAMBRIDGE, *December 1886.*



## MR OLIPHANT'S PREFACE TO THE VOLUME.

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THE present volume has arisen out of the Industrial Remuneration Conference held in the Prince's Hall, Piccadilly, in January of last year. The Report of that Conference has been published by Messrs Cassell & Co.; and in the preface there will be found an explanation of the purpose with which the scheme was initiated, and the manner in which it was carried out. It will be enough to repeat here that the general question proposed in the inquiry was, *Is the present system whereby the products of industry are distributed between the various persons and classes of the community satisfactory? or, if not, are there any means by which that system could be improved?*

The anonymous donor of the fund from which the expenses of the Conference were defrayed, finding that a considerable balance of the thousand pounds set aside by him was returned by the original trustees, asked me to undertake the task of disposing of this sum in whatever way should seem best fitted to carry on the inquiry.

On consideration it was decided to attempt something like a *résumé* of the facts and opinions brought out in the Conference, by asking several of those who had taken a prominent part in its proceedings to set forth their doctrines in a more extended form; and, inasmuch as the project had its birth in Scotland, it seemed good that these statements should in the first instance be delivered to audiences in some of the largest centres of Scottish industry. Care was taken that in the selection of subjects, and of lecturers, no single aspect or tendency should have undue prominence, and at the same time that no important section of opinion should be unrepresented. The lectures were given in Edinburgh, in Glasgow, and in Dundee, during the months of May, June, and July of this year, and the amount of interest which they aroused seems to promise that in a collected form they will be welcomed by a wider public as a valuable aid to the understanding of the present position of industrial problems.

Each lecture is here printed as it was delivered, subject only to the corrections of the author; and it will of course be understood, from the nature of the scheme, that the various writers are in no sense responsible for any opinions or statements in the volume outside of their own lectures.

JAMES OLIPHANT.



## *Irregularity of Employment and Fluctuations of Prices.\**

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I HAVE been determined in the choice of a subject for this lecture by a conviction, continually increasing in strength, that uncertainty of employment is the root-evil of the present industrial *régime*. By this I do not mean to imply, that even if we had done away with uncertainty of employment we should not still have to deal with other great causes of social mischief. Over-population, ignorance, selfishness, fraud and oppression, faulty systems of distribution, and the like, are vital and powerful sources of misery, the importance of which no one wishes to deny. But when we try to grapple with these evils, we find that the natural operation of remedial forces meets with a serious obstacle. The condition of a large mass of the people is so precarious, and the state of industry so unsettled, that social reforms, which must be gradual and slow, have no time to mature; and the situation alters before the proper remedies can be considered and applied. It is on account of its indirect consequences, then, even more than as an immediate cause of evil, that uncertainty of employ-

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\* Different parts of this lecture were given in full at the different centres, the remainder being sketched in outline only.

ment seems to me to demand the first place in the attention of the friends of social progress and of the claims of labour.

It may be objected that the subject is far too wide to be adequately treated in the time at my disposal, and that I should have done better to select some special branch of it for a more thorough handling. Such a course would certainly have been easier and more agreeable to me, and probably also to my hearers. But in a matter of this kind there is very much to be gained by the attempt to take a comprehensive view. In economic more perhaps than in any other discussions the danger is that principles are apt to be overlaid with details, so that we cannot see the wood for the trees ; and special points, in themselves deserving of notice, get undue weight assigned to them. This has been particularly the case in the current controversy as to the nature and causes of the depression of trade, a matter closely connected with our present subject. Warned, then, by this example, I have preferred to-night to go to first principles, and, risking the opposite danger of superficiality, to give you as fundamental and systematic a view of the subject as time will permit, trusting that many may be stimulated to work out the details for themselves.

Before commencing, it may be convenient that I should indicate the order of topics and the general results arrived at. I propose, then, to consider briefly, first, some of the evils arising out of irregularity of employment ; secondly, what light is thrown on the causes of this irregularity by an analysis of price fluctuations ; lastly, what seem to be the best means for securing greater social stability, and what progress

is already being made in this direction. It is not so easy to state in a few words the practical outcome of the inquiry. The industrial disease we are investigating is too complicated to be removed by any simple remedy ; but the general results to which I believe we shall be led may perhaps be briefly indicated in advance. The causes of disturbance seem to fall into two main groups. Some of them are due to the imperfection of our monetary, banking, and market mechanism, which, though greatly improved, is still only in a rudimentary stage of development. Others are directly connected with our system of production and habits of consumption. There is no reason why the first group should not be gradually removed by the progress of economic science and the accumulation of business experience. The second group presents graver difficulties. No mere mechanism, however scientific or ingenious, could enable us to control or to foretell the fancies of the consumer ; and the system of production is largely prescribed to us, whether we like it or not, by the existing state of physical knowledge and the industrial arts. In both respects, however, I believe that something can be done. And I have summed up the main directions which remedial action must take in two words—publicity and organisation.

#### EVILS RESULTING FROM IRREGULARITY OF EMPLOYMENT.

First, then, let us consider some of the chief evils due directly or indirectly to irregularity of employment. To many of my hearers this may well seem

a work of superfluity ; but I do not think that it is so from the point of view of the public in general. No doubt it is difficult for any one to approach the subject from the industrial side without being struck with the economic and social injuries resulting from violent industrial changes. But the trader often regards such disturbances merely as the normal occasions of profitable dealing ; and I doubt whether by any class the full extent of the injuries they cause is always recognised. At all events, those who desire to grapple with the mischief, and to mitigate the price fluctuations which lie at the root of it, find themselves opposed by prejudices and interests so strong that common prudence warns them not to neglect the statement of their case.

How far and for what reasons, then, are industrial fluctuations injurious? No one, of course, either expects or desires altogether to abolish fluctuations. Rhythm appears to be one of the most fundamental laws of the universe. Progress and motion of all kinds would seem to take place by waves, pulses, and cycles, not in uniform directions. Industry can claim no exemption from this law. In industry, too, as in other domains, unquestionable advantages result from a certain amount of disturbance. Change stimulates invention and energy, and prevents stagnation.

“The old order changeth, yielding place to new,  
Lest one good custom should corrupt the world.”

The question, in short, is entirely one of degree. A fresh breeze is as beneficial in industry as in navigation ; storms are destructive in either. It is not change in itself, but discontinuity, or violence of

change, which is injurious. When all admissions have been made, we must still hold with Comte, Mill, Brentano, Mr Frederic Harrison, and other social inquirers, that in the present state of society a large balance of social mischief results from more than a moderate degree of industrial disturbance.

The fact is, that where human beings are concerned, where personal relations should be formed, and where moral forces are at work, a certain permanence of conditions\* seems to be essential. The altruistic and social feelings, which are the very cement of the social fabric, and enormously lessen the irksomeness of effort and the friction of industry, seem to require time for their development, and frequently cannot exert their full strength unless they are embodied in the symbol of an organisation.

These considerations apply to all classes equally, rich and poor, weak and strong. But sudden change is peculiarly injurious to the weaker classes. They are not so well able to anticipate or to secure themselves against its effects. It is a sound instinct, then, which has led these classes in all ages to seek protection in custom, established by combination. Not, of course, that mere blind custom is better than intelligently adjusted, effective, and equitable competition. But it has often been remarked that certainty in taxation is more important than equality, because certainty will lead, under natural forces, to equality; and in the same way custom, or stereotyped competition, may be

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\* "That fixedness," to quote William Cobbett, "which is so much the friend of rectitude in morals, and which so powerfully conduces to prosperity, private and public."—*Hist. Prot. Ref.*, i., sec. 152.



better for the weaker class, because it gives time for adjustments, than incessant fluctuation, which involves incessant new bargains, in which their weakness necessarily places them at a disadvantage.

There is an infinite power of adaptation and accommodation in human nature ; but the process requires time. We form no exception to the general rule of organic life, strikingly illustrated in some recent experiments of Dr Dallinger, that gradual change in its surroundings will produce the development of an organism, where sudden change would be its destruction. Ricardo and the economists of his school, more familiar with the money market than with industry, greatly underrated the difficulty which the weaker classes find in adapting themselves to sudden changes. These writers seem to consider the effect of an industrial disturbance as very much the same as that of a pail of water thrown on a pool, over whose surface it soon spreads equally. The real conditions of industry more nearly resemble those of a viscous glacier. The glacier changes its form under severe strains, but only slowly, and at the cost of much fracture and internal disturbance. So in industry, the migrations of labour and capital often involve immense waste of skill and wealth. What were somewhat floridly described as the "bloodless victories of Free Trade" often left such a train of suffering behind them, that the epithet applied less truly to the victories than to their victims. So it has been, too, with the introduction of machinery. No doubt it is true, as Sir James Steuart observed in 1767, that "a room cannot be swept without raising dust." But careless sweeping sometimes makes more dust than it removes ; and the cheapness resulting

from machine production was often bought at the cost of grave injury and injustice to the hand workers. On this matter the great Sir William Petty, writing a century before, seems to express the common-sense of mankind. "Better," he says, "to burn a thousand men's labours for a time, than to let those thousand men, by non-employment, lose their faculty of labouring."

The waste and loss involved in change of occupation is not the only consequence of the unsettled state of modern industry. In many occupations the employment of those who remain in them is very precarious and irregular. This means, of course, a large reduction in actual earnings, even though nominal wages may be maintained, or perhaps increased; we shall presently find that it is also a powerful cause of the reduction of nominal wages. The following instances may serve to shew the effect on actual earnings in a few cases. The rector of Gateshead, in a sermon recently preached before the University of Cambridge, speaks of steady industrious men, nominally earning 20s. to 22s. per week, actually receiving on the average only 8s. or 9s.\*

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\* "The wages of artisans, as paraded in statistical reports and the columns of the press, sound fairly adequate. We hear with complacency of 18s. or 20s. per week as the remuneration of unskilled labour in towns; but few, except those in constant contact with the poor, know how very precarious such wages often are,—how for weeks and weeks a man, steady, industrious, willing to work, will often not average more than 8s. or 9s., and sometimes for long periods even nothing at all. Life is a sad and hopeless business when a man sits staring into an empty grate, weak and faint after a weary dispiriting search for work. No food for himself—and worse, none for his hungry children; no means of buying any, for the home comforts gathered round him in time of regular employment have been pawned one by one. Is it any wonder that, flying from his wretched home,

The London dock labourers, when in work, often earn £2 a week ; but they are sometimes six weeks, or more, without work. They are described as living filthily, and as stating that they "would gladly exchange for £1 regular." Again, in an analysis of 273 cases made by my brother, Dr Arthur Foxwell, in Manchester, he found that, where the nominal wages varied from 14s. to 35s. a week in different occupations, the highest average earnings were those of the regularly employed corporation labourers, whose nominal wages were 20s. Twelve joiners, nominally receiving 26s. 9d. a week, only averaged 13s. actual earnings ; and four masons, nominally receiving 35s., only averaged 10s.

It will be said that some of these are exceptional cases, that they give an exaggerated impression of the general conditions of employment, and that we should form average estimates over wider areas. It is certainly probable that such intolerable interruptions of employment are not of general occurrence. But I would observe that no one can speak with authority on this point ; for on this, perhaps the most vital matter affecting the welfare of the people, we

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he should hover round the one bright cheerful spot in the neighbourhood, the public-house at the corner, and gladly accept the invitation of the first companion who offers to treat him, and so allow himself to be dragged down deeper still?"—*Sermon at Great St Mary's, Cambridge, May 3, 1885, by the Rev. W. Moore Ede.*

I have ventured to quote this passage in full, because the rector of Gateshead is no mere sentimentalist, but a trained and able economist, who has had exceptional experience amongst the working classes of our great towns.



have no official statistics.\* But granting that the average regularity of employment is much higher than in the cases named, what is this to the individuals who fall below the average? This matter of fluctuations, in short, is one in which the method of average results, so dear to a certain class of writers, proves most inapplicable and misleading. Social disorganisation never balances itself. You cannot say that what a man loses at one time he gains at another; still less, that what one man loses another man gains. The very facts of uncertain transitions, of doubt, and of partial distress, must always be absolute social disadvantages. It is very much like the case of a hilly line of railway. The descents do not compensate for the ascents. Every one knows that the level line is the most economical one to work.

There is another very important point to be noticed. This forced idleness—or “playing,” as it is somewhat ironically called—would be bad enough, even if, on the average, it were equally distributed. But it never is so distributed. It usually falls most severely on the weak or inefficient workman. And thus is created a “fringe of unemployed,” who are forced by their misery to compete for work on any terms. Trade societies, with admirable judgment, have made great efforts to prevent this kind of competition. But wherever it exists wages in general become depressed, and the conditions of employment are worsened. In both ways the whole trade is injured, and a slowly acquired position of comfort may be lost.

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\* For some idea of the amount of “playing,” see Dudley Baxter, *National Income*, 1868, p. 41; Leone Levi, *Wages and Earnings*, 1867, p. 5.

I do not think this matter of quantity *versus* rate of employment has been sufficiently considered by some of those writers who give us such rose-coloured pictures of modern industrial progress. Progress, no doubt, there has been, and Mr Burnett was right in the sarcastic comments he made on the so-called "good old times." But in this matter of stability and certainty of position we have something to learn, I think, even from the much despised Middle Ages. The very laws whose severity and harshness Mr Burnett denounced bear witness to the horror with which Middle Age opinion regarded the man without a settled place in society, without "visible means of subsistence" or recognised sponsors and protectors. We, on the other hand, are apt to speak very lightly about the unemployed. We presume they will "find some other occupation;" or that the interruption to work will only be "temporary." Perhaps there are some who do not readily realise what it means to a respectable artisan, with only ordinary resources, to be "six months out of work." I would ask them to aid their imagination by reading that admirable chapter of the great American economist, General Walker, on the "Degradation of Labour."\* The ruinous consequences there described do not merely injure the present generation. It is the children, the doctors tell us, who suffer most severely. Yet all these evils, the misery of one generation, the weakening of the next, are the ordinary and necessary incidents of our present state of industrial disorganisation. Are we to complacently approve this

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\* *The Wages Question*, chap. 4.

state, merely because the rate of nominal wages is fairly high?

I cannot venture to say what would be the general opinion of the working class upon the point ; but my own feeling would be, that when a certain necessary limit had been reached, regularity of income was far more important than amount of income. Where employment is precarious, thrift and self-reliance are discouraged. The savings of years may be swallowed up in a few months. A fatalistic spirit is developed. Where all is uncertain, and there is not much to lose, reckless over-population is certain to set in. These effects are not confined to the poorer classes. The business world is equally demoralised by industrial fluctuations. Careful prevision cannot reckon upon receiving its due return, and speculation of the purely gambling type is thereby encouraged. But the working class suffers most. To this class thrift and prudence are absolutely vital ; and it emerges from a period of disturbance with its standard of comfort seriously lowered, and with a corresponding loss of social position.

It is the fashion now-a-days to speak slightly of the lower middle class ; and no doubt there is a certain narrowness and want of imagination about many of them, which contrasts unfavourably with the larger ideas and superior public spirit of the leading artisans. But the general orderliness and thrift of this class, and even their "respectability," are by no means to be despised. To what are these qualities due? More than to anything else, I think, they are due to the superior certainty and regularity of middle-class income. This may explain, too, that much noticed fact

of the rush for clerkships, poorly remunerated as they now are. It is often supposed to be due to narrow and mistaken notions of respectability, to a preference for broadcloth rather than shirt sleeves, and so forth ; but in reality it may be perfectly reasonable. The work of a clerk may be less manly, less interesting, than that of the skilled artisan ; and the clerk's salary may be less than the artisan's nominal wages. But the position of the former is less precarious ; and so important is security, that this may balance the disadvantages. Look round at railway servants, Government servants, or where you will, and wherever you see a class whose bearing and refinement and comfort seem to be higher than you would have expected, it is ten to one you will find they enjoy regularity of employment.

But there is stronger evidence than any we have yet noticed of the mischief caused by industrial fluctuations. In social matters of this kind, a broad view of history often gives a surer basis for a practical conclusion than *à priori* reasonings, however careful. What has English industrial history to say on this point ? When that very painful chapter which deals with the period 1760-1850 comes to be written, one thing at least will be clear. This period, which marks the reign of industrial anarchy, is also the period of the growth of the proletariat. The mass of half-starved misery we call by that name was created by the uncertainties of the modern labour market. The very same industrial changes which raised the wages of those who could secure employment, made the position of the majority more precarious and their prospects more indefinite. Thus while wealth in-

creased rapidly, population and destitution advanced with almost equal strides. This is the real explanation of the observed connection of Progress and Poverty.

I venture to think it is a mistake to suppose that increased comfort is a cause of over-population where the social conditions are settled. The tendency seems to be rather the other way; and philanthropy need not hold its hand from any apprehensions on this score.\* The English population never increased more rapidly than between 1801 and 1841. But these were years of great misery to the industrial classes. Mr Giffen tells us† that "periodic starvation was in fact the condition of the masses of working men throughout the kingdom fifty years ago. . . . The price of wheat had quite a special importance." But population, instead of falling off, increased 80 per cent. in the forty years. During the years of brisk trade which followed population increased at a slower rate; and it was not until the last census decade that the rate of increase approached that of the first half of the century. The cause of the misery and the rapid increase was one

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\* Since I wrote these words, I have noticed a striking confirmation of them. It is quoted by M. Eugène Buret, in his remarkable work, *On the Misery of the Working Classes in England and France* (1840, i., p. 36), from an Austrian official publication of some English returns. "In 1821 the population of Ireland was 6,801,827. In 1831 it had risen to 7,764,010, an increase of 14 per cent. in ten years. In Leinster, the province where there is most comfort, the population only increased 8 per cent.; whilst in Connaught, the most miserable province, the increase amounted to 21 per cent." M. Buret holds "that the numbers of the miserable increase in proportion to their misery, and that it is at the extreme limit of destitution that men come pressing forward thickest to compete for the right to suffer."

† *Essays in Finance*, Second Series, p. 379.



and the same. Mr Giffen has described it in another paper on the same subject, and his description is not overdrawn. It was "the complete, or almost complete, suspension of the ordinary wages for long intervals, . . . the liability to extreme fluctuation, . . . to an extreme of fluctuation of which the present generation has no conception" (p. 449).

Sir F. M. Eden, in his famous work on the *State of the Poor*, distinctly connects the growth of pauperism with the growth of manufactures.\* Here again the connection seems clear. The new manufacturing era brought with it the break-up of the old organisations. It made the labour market vague and indefinite, and at the same time extremely variable. The disturbance thus caused was aggravated by a rapid rise of prices, due to bad banking ; and later on by bad harvests and war measures, which led to unparalleled fluctuations in the price of bread. The result is seen in the terrible social misery of which we may read in the painfully graphic pages of the Blue Books of the time. From the worst features of this misery we have now happily escaped, thanks to Trade Unions, Factory Acts, and other beginnings of re-organisation ; but it has left an indelible mark on our

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\* Speaking of the parish of Bromfield, Cumberland, he says, "Within the last twenty years the poor's rates have nearly doubled ; this is the more extraordinary, as there are no manufactures in the parish" (ii., p. 49). Again, speaking of the Coventry district, he says, "In a country parish on one side the city, chiefly consisting of cottages inhabited by ribbon-weavers, the rates are as high as in Coventry ; whilst in another parish, on the opposite side, they do not exceed one-third of the city rate. This is ascribed to the care that is taken to prevent manufacturers from settling in the parish" (iii., p. 743).

national history, and bequeathed to us some of the most perplexing social problems of the present day.

If I refer to the bearing of industrial fluctuations on crime and social convulsions, it is not that I intend to appeal to any motive so base as fear. I do not think society has any reason to be afraid of revolutionary movements, at least of such as proceed by violent means. Yet it must be admitted that revolutionary movements are always mischievous, if only to the revolutionists themselves; and that the uncertainty and apprehension they cause, are in themselves real social evils, real hindrances to economic prosperity. It is well to notice, then, that irregularity of employment is the main source, as it is certainly the most natural source, of social bitterness and discontent, and of the crime and violence arising out of this feeling. Flint has observed, in his *History of Crime in England*,\* that in times of distress crime increases 24 per cent. on the average, and 51 per cent. in the manufacturing districts; and that crimes against property with violence increase 50 per cent. on the average, and 103 per cent. in the manufacturing districts. Mr Pike brings evidence to a similar effect.† The greater increase in the manufacturing districts is what we should expect from the greater uncertainty of employment there. The connection with revolutionary disturbance is still better marked. I need not refer to the circumstances of the Chartist rising, or of the events of 1848 in France. We have had an excellent illustration of it within the last year. The recent contraction of trade, and the consequent loss of

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\* *Crime in England*, 1851, p. 83.

† Cf. his *History of Crime*, 1876, ii., p. 679.

work and lowering of money wages, has led to riots over both the civilised worlds,—in Chicago and New York, no less than in London and Vienna, Belgium and France.

I do not think, then, that there can be any reasonable doubt as to the evils of variable employment, or as to the duty of endeavouring to remove their cause. It is practically admitted so far as regards the small cultivator of land. Indeed, so far has the doctrine been carried by some, that we are told eviction is a crime, and that, whether or not the landlord can get his rent (which is practically only a moderate interest on his purchase money), the small tenant must have security of tenure. Well; but if so, why is the artisan to be exposed to the accidents of competition? Perhaps we may presume that, in attempting to obtain for this class more social security, we shall at least have the sympathy and assistance of the wealthy employers who denounce landlords for evictions.

To me, at all events, it seems impossible to overrate the importance of greater industrial security. But I feel that I have very imperfectly explained to you the reasons for my conviction. Let me, then, reinforce my opinion by an appeal to authority. I will ask you to listen to two short extracts, which will shew how the matter presents itself to two observers, each of them specially qualified, though in a different way, to pronounce upon it. The first is from the famous Catholic Socialist, Bishop Ketteler; the second from Mr George Howell, a representative of our own artisan class.

Bishop Ketteler says: "It is no longer possible to



doubt that the whole material existence of almost the entire labouring population,—that is, of much the greatest part of men in modern States, and of their families,—that the daily question about the necessary bread for man, wife, and children, is exposed to all the fluctuations of the market and the price of commodities. I know nothing more deplorable than this fact. What sensations must it cause in those poor men, who, with all they hold dear, are, day after day, at the mercy of the accidents of market price! That is the slave-market of our Liberal Europe.”\* Mr Howell’s language is very similar. “If,” he says, “the science of political economy is to be of any practical value, its expounders ought to try and find some means whereby these frequent fluctuations can be avoided; instead of which they only teach men how to increase them, by declaring that wages must be dependent on the variations of ‘the market,’ which may change fifty times a day, in so far as the price of the commodities offered for sale is concerned. Stock and securities ‘go up and down’ like the notes on a gamut, and in the hands of skilful operators they play strange music, which should make good men feel sad indeed.”†

I remember reading that paragraph of Mr Howell’s when his book first appeared, and being deeply impressed with it. I felt that he was right, not only as to the injury caused by fluctuations, but when he charged economists as a body with having in some respects helped to increase it. Many of them, however, have done good service in this field, and one in

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\* See John Rae, *Contemporary Socialism*, pp. 248, 249.

† *The Conflicts of Capital and Labour*, p. 228.

particular. We owe to Jevons, the most brilliant economist of his time, a series of admirable researches into the causes of price movements.\* In the analysis of price fluctuations to which I now invite your attention, I have done little more than attempt to place before you in a simple form the bearing of Jevons' researches on the problem before us.

I have expressed that problem hitherto as, *How to secure greater industrial stability*; but we may put it in this form, *How to diminish price fluctuations*. For, in a competitive society of the modern type, it may be assumed that, though not every fluctuation of price leads to interruption of employment, yet there is no cause of interruption of employment which is not indicated by a fluctuation of price. The reason is clear. We are mainly moved in industrial matters by self-interest. Trade and industry are controlled by the employer; and the employer's interest is measured and indicated by the movements of market prices.† Hence, as Malthus said, "the market prices of commodities are the immediate causes of all the great movements of society in the production of wealth."‡ If the statement was true in 1820, it is still truer now, except where the beginnings of the new organisation of industry may have introduced modifications. For industry is carried on upon a larger scale than ever, and with finer margins of

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\* See his *Investigations in Currency and Finance*, 1884.

† No doubt other considerations must be taken into account in practice, such as the importance of keeping a trained staff together. What I have said above is true as a first approximation.

‡ *Principles of Political Economy*, 1820, p. 342.

profit ; and it is, more than ever, under the direction of large employers.

In other words, interruptions of employment are to a great extent directly caused by disturbances originating in prices. Where they are not, their causes are reflected in the movements of prices, and these movements themselves become fresh causes of disturbance. Hence a complete analysis of the movements of prices will give us a general view of the causes of industrial disturbance, and help us to distinguish those causes which arise directly from our price mechanism from those which are connected directly with our industrial organisation and our habits of consumption. We can then proceed to consider, with a better sense of their relative proportion and importance, the various kinds of remedies required. Thus those who would do away with fluctuations in employment must first understand the causes of price movements. The analysis that follows may accordingly be regarded as a small contribution to the object Mr Howell and so many others have at heart.

#### ANALYSIS OF PRICE FLUCTUATIONS.

If we had no other way of representing prices but by tabular rows of figures, I do not think that we should have advanced very far in the analysis of price movements ; and certainly I should have despaired of putting the results of that analysis before you in a simple form. It would be as difficult a task as to describe the course of a river by stating the latitude and longitude of its successive bends. The mathematicians, however, long ago discovered that numerical

quantity might be represented by position in space ; and since the time of William Playfair, who wrote at the end of last century, the method has been applied to the study of statistics of all kinds. This graphic method, as it is called, has immense advantages, especially for our present purpose. Instead of toiling through a list of a hundred numbers, the eye can take in all the information conveyed by this list, not only more easily but more completely too, by simple inspection of an undulating line or curve. And when we have to compare various sets of prices the advantage is still greater. When the curves are properly constructed, we have only to superimpose them, and their points of resemblance and difference appear at a glance. All the movements of prices, then, which we shall consider to-night, I have for these reasons represented by curves, upon the accompanying charts.\*

The graphic method has been so much used of late years that I think the principle of construction must be familiar to most of my audience. In the case of these price curves it is very simple. Horizontal distance, from left to right, is taken to measure the units of time, or the dates of the several prices ; and vertical distance, distance above the base line, is taken to measure the units of money, or rates of the prices. Thus if we take the curve representing the price of iron, we find that in 1870 the price as thus indicated was 50s. a ton, that it touched a maximum of 145s. in 1872, fell to 40s. in 1879, and so on, with intermediate prices at intermediate dates. I have prepared three

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\* The charts actually used were on a very large scale, so that in the process of mechanical reduction the figures and letterpress have become almost too small to be legible.

curves of this kind, representing the prices of three important commodities—tin, iron, and cotton—for the period 1870–1886. Immediately above them you will observe another curve, which I have called the curve of General Wholesale Prices, covering the same period of time. This curve is a fragment, the last fifteen years, namely, of the much larger curve of General Wholesale Prices on a separate chart. A word of explanation is required as to the principle on which this curve of general prices has been constructed.

I have said that the three curves of tin, iron, and cotton shew us the prices at different times between 1870 and 1886 of each of these commodities,—*i.e.*, of a certain unit quantity of each of these commodities, of a pound of cotton or a ton of iron. The curve of general wholesale prices also shews us the prices at different times of a certain unit quantity of commodity. But in this case the unit quantity priced is not a quantity of any particular commodity, but a sum of quantities of a certain group of commodities, which have been selected as types of wholesale commodities in general. For convenience of comparison, this sum of quantities is so arranged that, while it fairly represents the relative importance of the several selected commodities, the total cost of the whole at the average prices of the six years 1845–1850 inclusive amounts to £100. There was a reason for choosing the period 1845–1850 as the basis of comparison. It was the period immediately preceding the great discoveries of the monetary metals in Australia and California. This curve, then, enables you to trace over a whole century (from 1782 to 1886) the alterations in the money price of a sample group of wholesale commodities, and to



compare these alterations by the standard of the average prices current during the six years before the last gold discoveries. In other words, as you will readily see, it gives us a measure of the changes in the power of money to purchase wholesale commodities. As the principle of this curve may perhaps be a little strange to you, and the facts it expresses are of immense importance, it may be worth while to consider some of those facts by way of illustration.

You will see, then, that it required £224 odd to buy in 1809 the commodities which would be bought in 1845-50 with £100; that even in 1789 those same commodities would have cost £121; and that at no time from 1782 to 1849 could they have been purchased for so little as in the latter year, when they would have cost £90. Again, if we look at the later period, we find that the commodities which could have been bought for £100 in 1845-50 would have cost £151 in 1864, and £142 in 1873, and might have been bought for £92 in 1885. Taking a general view of the whole curve, we may describe the facts it expresses in this way. From 1785 to 1810, during which time there was a very excessive issue of credit by the banks,\* as well as an increase in the yield of the mines, prices rose, or the value of money fell. From 1810 onwards we may say that the tendency has been for prices to fall, and the value of money therefore to rise; but that this tendency was checked by the gold

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\* The usual correction has been made for the difference between paper and gold prices during the Bank Suspension (1797-1821); but this does not exhaust the effect of the Bank Suspension, which undoubtedly caused gold itself to depreciate in value.

discoveries of 1850, which caused a general rise of prices, and fall in the value of money. In 1873, the year in which silver was practically demonetised, a sudden stop was put to this rise of prices. Prices resumed their downward movement; or, in other words, the value of money began to rise again. This is the state of things in which we now find ourselves.

I am not now going into all the causes and effects of the movements recorded in this curve of prices. My object is merely to enable you to read the record for yourselves, to translate the curve into ordinary language. But I wish to say just a word or two about the general facts it expresses, because they are not perhaps exactly what you would have expected to find them; and the explanation of the difficulty will shew you more clearly what it is precisely that the curve represents.

It will astonish most persons, I think, to find that wholesale prices were on the average much higher during the first than they have been during the last half of this century. I suppose the common impression is, that though prices have undoubtedly fallen during the last four or five years, yet, speaking broadly, money does not go as far as it used to, and that an income of £300 (say) would have been worth more to its possessor the longer we go back. Well, the first remark I have to make to any who may hold this view is, that this curve does not pretend to deal with everything that money will buy. It is based only on the values of certain selected and typical wholesale commodities. It has nothing to do with retail prices, with rents, wages, or salaries, or with rates and taxes. It takes the point of view, in fact,

not of the housewife, but of the employer. It is not framed so much to measure the change in the value of gold in general, as its change in value in relation to wholesale commodities. It is this latter relation which we must study in order to observe the effect of prices on trade, and through trade upon regularity of employment. The curve therefore suits our purpose very well, though it does not give an accurate measure of the purchasing power of the housewife's income.

The second point to be borne in mind as we compare the evidence of this curve with the impressions of our own experience, is that in the period to which it refers there has been an enormous multiplication of comforts and luxuries, and a consequent expansion of wants. The luxuries of one generation have become the ordinary comforts of the next ; and what were once comforts have become necessities. The standard of comfort has risen more rapidly than the rise in the value of money. Hence the value of money, by a very common illusion, seems to have fallen.

Let us now return to the three curves representing the prices of tin, iron, and cotton between 1870 and 1885, and to the fragment of the curve of general prices which refers to the same period, and which I have repeated above them. If we compare these curves, we cannot fail to notice two points : first, the similarity in general shape of the three curves ; secondly, their resemblance in general shape to the corresponding part of the curve of general prices.\* Whatever commodities we had chosen for comparison, the result

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\* The resemblance is not so close in the latter part of the tin curve ; the reason for this will appear shortly.



would have been much the same. It is one of the first importance, not only in the theory, but in the practice of business. I will express it in these words : To a certain extent the prices of all commodities tend to vary in sympathy with one another, and in correspondence with a variation in general prices. In all the variations of particular prices, then, different as they may be and various as are their causes, there is a common element of variation, due to the variation of general prices. This is our first result.

But the variation in general prices itself requires analysis. It is not a simple movement, due to a single set of causes, but a complex movement, made up, as we shall find on examination, of three kinds of movements, each due to a different set of causes. To make the results of this examination clearer, I have given you the curve of general prices for a whole century, instead of for fifteen years only as in the other cases. Let us think for a moment, as the eye sweeps over this great series of changes, what it really implies. There is something very impressive—to my mind almost awe-inspiring—about this strange curve. Its vast ground-swell, the greatest rhythm known to economic science, can only be exhibited on a scale of centuries. It forms the very backbone of our commercial history. It marks redistributions of wealth such as no Acts of Parliament have ever ventured to decree. It is difficult to exaggerate, and impossible to realise, the untold misery and innumerable changes of fortune caused by its terrible fluctuations.

But we must resist the temptation to moralise, and continue our analysis. What is the first thing that strikes us as we take a general view of the curve? It

is the regular recurrence of a wave or undulation once every ten years or so. This is the commercial fluctuation so well known in the business world by the crisis in which it usually culminates. It has been distinguished as the "credit cycle," because it is the result of the expansion and contraction of commercial credit. Jevons has calculated the average period of this cycle as about 10·6 years.

One of the elements, then, composing this complex curve of prices is a wave occurring about every ten years. But it is evident that the actual undulations of the price curve are not perfectly uniform. They are irregular in shape, and the shape is not always the same. This irregularity arises from movements in the general money market, due either to speculation in the money market itself, or to the effects on the money market of movements originating in the great wholesale markets. We must add, then, to the credit cycle, irregularities arising in the general markets, as a second element of the general price curve.

But I think you will easily detect a more fundamental movement, underlying both those I have noticed,—the ground-swell, as I have called it, of the general price curve. The oscillations of the credit cycle, and of the general markets, do not take place about a horizontal level of prices, but about a base or standard of prices, which sometimes rises and sometimes falls, and whose movements retain the same direction for long periods of time. These fundamental movements of price are caused by changes in the demand or supply of the monetary metals. We may speak of them as variations in the standard of value. I have already pointed out the general character of

these variations. From 1785 to 1810 the value of money fell, and prices rose. From 1810 to 1850 the value of money rose, and prices fell. From 1850 to 1873 the value of money fell, and prices rose. Since 1873 the value of money has been rising again, and prices have fallen to the level of 1850.

This completes the analysis of the movement of general prices, which we have now separated into three distinct movements. Before we pass on, however, I would call your attention to some consequences of this analysis. First of all, there is a marked distinction between a fall of prices due to the credit cycle movement, and one due to an alteration in the standard of value. If the low prices are the result of a credit wave, they will shortly be succeeded by high prices; if they are due to an alteration in the standard, they may possibly be followed by still lower prices. This is not always understood. A Sheffield employer not long ago complained to me that business men felt puzzled at the state of trade. They were accustomed to expect a recovery of prices after three or four years of low price; but the low prices seemed now to be persistent. Our analysis makes the reason of this quite clear. The prolonged depression of prices is not due to the ten-year credit wave, but to a continuous change in the value of money. The other corollary from our analysis is this:—When the value of money is falling, the general basis of prices, about which the credit wave undulates, is an ascending line. Consequently, the years of rising prices are more numerous than those of falling prices; and the extent of the rise is increased, while the fall is broken. This was the case from 1850 to 1873; trade increased by

leaps and bounds. Since 1873 the value of money has been rising. The basis of prices is a descending line. The situation is reversed.

If we now return to our three particular price curves,—the tin, iron, and cotton curves,—we cannot fail to observe, that though, as I have said, they contain a common element of fluctuation, due to the fluctuation in general prices, yet this does not altogether account for their peculiar shapes. We can distinctly trace in them the effect of the general alteration in the standard of value, as well as of the credit cycle, and perhaps, to some extent, of the minor changes in general prices, due to movements in the general markets. But their variations are more extreme than those of the curve of general prices ; and, though they shew a general resemblance to one another, each clearly has a character of its own. This individuality of the special price curves is due (*a*) to the nature in each case of the dealings in the markets for the commodity, (*b*) to special conditions affecting the demand and supply of each commodity. I have said that all the great wholesale markets have a certain sympathy with each other, and consequent effect on general prices ; but they also have their own peculiar operations and movements ; and, generally speaking, the smaller a market is, the more easily can it be disturbed by such operations. It is clear, too, that each commodity is subject to fluctuations in its price arising from changes in its production, due to natural causes, discovery, or invention ; as well as to fluctuations in price arising from changes in its consumption, such as those due to fashion, to the introduction of a substitute, or to the opening of new markets.

Thus, if we take the case of the tin curve, the rise in the price of tin in 1872, and the subsequent severe fall, were partly due, no doubt, to the corresponding movement in general prices. But they were greatly and most mischievously aggravated by a "ring" in the tin market, made in the interests of certain financiers who were speculating in Cornish mine shares, which sent up the price per ton from £82 in 1866 to £165 in 1872. Again, the price of tin after 1877 does not shew the same clear tendency as that of iron or cotton to fall in sympathy with the general fall of prices. The slight rise of general prices in 1880, due to the credit cycle movement, becomes a considerable rise in the case of tin, while the subsequent fall is postponed and lessened. This is because the production of tin is one which just now exemplifies in a marked way what the economists call the law of diminishing returns. We are told that the old workings soon become relatively unprofitable to continue, and that new ones must continually be sought for. Thus the increased quantity required by the increasing wealth and population of the world can only be supplied at an increasing cost. It is clear that, where the supply of a commodity is subject to this law, the price tends, other things remaining the same, to rise. It would be easy to multiply similar illustrations of the effects thus produced on prices by special conditions of supply and demand ; but time presses, and I must leave you to furnish other examples from your own experience.

A complete analysis, then, of the causes of fluctuation in the price of any particular commodity leads us to detect six elements of change. These elements



are graphically indicated on that part of the chart headed "Constituent Elements of Price Curves," where I have grouped them under three heads. Let us now take a systematic view of them, by way of summing up the results of our analysis.

First we have the great movement in general prices, due to the alteration in the average value of money, and known to economists as the appreciation or depreciation of the standard of value. Then we have certain periodic variations in general prices, due to variations in the quantity of credit, of which the only one we need here notice is the famous ten-year credit cycle. These two may be called currency variations, or *general price movements*.

Next we come to *movements originating in the markets*, and due to dealing and speculation. These also may be divided under two heads, though their graphic representation will be the same in each case. They may either concern the general money market, or be practically confined in their effects to the market for a special commodity. In the former case they belong to the group of general price movements; in the latter they belong to the third group, the group of movements special to the particular commodity. I have placed them, however, in a group by themselves, under the head of "Markets," because the operations which give rise to both these kinds of disturbances are of a similar nature, and are sometimes very intimately connected.

Lastly, there are the *special causes of price movement peculiar to each particular commodity*. These I have arranged under the two heads of "Production" and "Consumption," or, in other words, of Supply

and Demand. Under Production we have the general law of Supply,—*i.e.*, whether of increasing or diminishing returns; the effects of invention and discovery, and the contingencies of fisheries and harvests. Under Consumption we have the general law of Demand,—*i.e.*, its variation with the progress of society; the effects of alternative products, of new markets, of fashion, taste, or boycotting.

These, very briefly stated, are the principal causes of price fluctuation; these are the points to which I invite the attention of those who are interested in regularity of employment. I take it for granted that most of us here wish to see these price fluctuations lessened, and confined within harmless limits. Such violent disturbances of price as are depicted on the charts before you no doubt suit the game of a certain small class of speculators. But those who wish to gamble have ample facilities specially provided for them in the present highly civilised age. There is no reason why they should make a dice-box of industry. No one objects to their staking their own fortunes; but they need not play with the fortunes of their fellow-men. I pass on, then, to consider what are the remedies for price fluctuations.

### REMEDIES FOR PRICE FLUCTUATIONS.

With this wide and difficult part of our subject I can only deal in the most general way. It is rather for men of affairs than students of causes and effects to devise practicable schemes of reform, and to judge when the situation is ripe for introducing them. But the reason of the matter is quite clear, and I may

attempt to give you a few of the more important results to which inquiry seems to lead. I propose to deal with the various causes of fluctuation in the order in which I have just stated them, and for the most part very briefly. But I shall lay particular stress upon the first of them,—the change in the value of money,—because I do not think it is so generally recognised and understood as its importance deserves. Passing more rapidly over the other general price movements, and coming to the disturbances of particular prices, I shall consider, not so much the detailed remedies themselves, as the methods of social reform by which these and other remedies are most likely to be supplied. Thus I shall be brought, in conclusion, to notice the new lines which the evolution of industry seems now to be taking, the progress which has already been made on these lines, and the chief obstacle which prevents more vigorous, intelligent, and conscious advance.

Of the causes of industrial disturbance which may be classed as defects in our mechanism of exchange, the first and most important is the remarkable fluctuation in the standard of value. The measure of value, like the measure of time, the measure of length, or the measure of weight, should be as nearly as possible invariable ; but we have seen that it varies in a very marked degree, and that at the present time the value-unit is increasing rapidly. The value of gold as measured in commodities, by which all our contracts are regulated, is steadily rising. We must now consider the causes, effects, and remedies of this state of things.

As to the causes, it seems to me, as it does to Mr



Goschen, that the whole case "lies in a nutshell."\* The value of money (assuming its rapidity of circulation to remain the same) depends upon the relation between the quantity of metal available for use as money, and the amount of the transactions requiring to be liquidated by money. Hence as population and wealth and trade increase, there will be an increased demand for money; and the value of money, so far as this is concerned, will tend to rise. On the other hand, if by the introduction of credit we can economise the use of gold, the value of money will tend to fall. Both these causes, however, have been operating throughout the whole of this century; and, since 1850, in much the same degree. Yet from 1850 to 1873 the value of money fell; while from 1873 to the present time, the value of money has been rising. We must look elsewhere, then, for the cause of this change. We find it partly in the diminished supply of gold. The effect of the Australian discoveries is becoming exhausted. The production of gold, which in 1852 was about  $36\frac{1}{2}$  millions sterling, has fallen off steadily until in 1884 it was only 19 millions. If gold were the only monetary metal in use, this circumstance alone would account for the change. But silver also is a monetary metal. And the supply of silver has increased as much as that of gold has diminished. It increased from 9 millions sterling in 1852 to 23 millions sterling in 1884.† Hence if the two metals had been indifferently used as money during the whole of the

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\* *Address to the Manchester Chamber of Commerce*, 23rd June 1885, p. 21.

† The valuation of silver in gold is made at the bi-metallic ratio of  $15\frac{1}{2}$  to 1.

period we are considering, there would have been little change in prices. But the unfortunate and unintelligent action of the German Government after 1871, when it resolved to exchange its former silver standard for a gold standard, set in train a series of events which ended by practically demonetising silver in 1873, and causing a largely increased demand for the already shrinking supplies of gold. France, which for seventy years had been using both metals under what is called the bi-metallic system, was obliged to suspend the operation of this system, and to restrict the mintage of silver, at the same time largely strengthening its supply of gold reserve. The other countries which with France formed the Latin Union necessarily adopted the same policy ; Italy going still further, and resuming cash payments upon a gold standard. This being the European situation, when the United States resumed cash payments in 1878 they found it impossible to revert to their former bi-metallic standard, and were obliged to restrict the coinage of silver dollars. The net result of these changes is thus estimated by Mr Goschen. Germany, he says, has since 1872 demanded £84,000,000 more gold ; Italy, £16,000,000 ; and the United States, £100,000,000,—an extra demand for £200,000,000 falling upon a metal whose annual supply has diminished fifty per cent. It is no wonder that prices have declined. It has been said that Mr Goschen's estimate was excessive. But even if we take the lowest put forward seriously, that of the *Economist*, which makes the new demand caused by the action of Germany amount to £140,000,000, we have still an ample explanation of the fall of prices.

We may look at the matter from another point of view, and the result is much the same. How much gold have we been able to secure in the United Kingdom for our own use during the period since 1850? If we take the balance of imports over exports of gold (bullion and specie) as given in the Statistical Abstracts, we find that for the thirteen years 1858\*–1871 inclusive, the average balance of imports is 6·8 million pounds a year; and for the thirteen years 1872–1884 inclusive, the average balance of imports is 0·7 million pounds a year,—that is to say, our net imports for all purposes in the latter period have been about one-tenth of our net imports in the former. This evidence, I think, should be enough to convince the unprejudiced that the fall of prices is due to a scarcity of gold, largely caused by the action of Germany in 1872.†

I admit, of course, that in a highly-banked modern society, where you must allow for the disturbing influence of the fluctuations of credit, the relation between money and prices is difficult to trace, and by no means obvious at first sight. Jevons has called it “the Gordian knot of economical science.” But the

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\* The figures for imports are not registered before 1858.

† It may be noticed, as a further proof, and as an example of the power of prevision which always goes with real scientific insight, that the results which I have attributed to the German demonetisation of silver were predicted by Mr Seyd in 1868 as certain to follow any operation of the kind. “It remains to be seen,” he added, “whether the universal adoption of the English system will not move away the foundation of that system.” Perhaps we may hope that if the system does become universal, the consequent disturbance of prices will necessitate its being recast, and placed on a more scientific basis.

relation exists, none the less. Though the causes are disguised in their operation, and the effects modified in amount, yet variations in the supply of money have the same substantial influence on prices as under a simpler system. The reason is, that the monetary metal, though it only forms a small percentage of the total circulation, has a controlling influence on the remainder of it. On this the best authorities are agreed.\* There are always some persons who, when the matter in dispute relates to the currency, refuse to put two and two together. These persons, in 1809, when bank-notes were inconvertible and greatly over-issued, so that a £5 note was only worth £4. 7s. in gold, asserted that it was not the notes which had become depreciated, but gold which had risen in value. So to-day we are told by some that the fall of prices is not due to a scarcity of gold, but to "over-production." Nearly all I have to say about the remedies for a fall of prices assumes the error of this view; but I do not intend to occupy any more of your time in arguing the point; the facts are really too strong.

There are others whose views I must not so lightly pass over. They cannot resist the evidence as to the

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\* "The special importance of cash in the modern industrial system, though it is not, as in a simple system, a large portion of the circulating capital of a country, is established. It is of immense regulating power. It is able to produce changes in the money market, and affect for a time, at least, the rate of discount in the short loan market. If the rate of discount, in turn, cannot but affect operations of every sort on which prices and wages depend, then the influence of 'cash' on transactions, even in the modern system, is placed beyond doubt."—R. Giffen, *Essays in Finance, Second Series, 1886*, p. 66.

Cf. Prof. J. S. Nicholson, *The Silver Question, 1886*, iv.

cause of the fall of prices ; but they deny that the thing itself is of any importance. Some of them say that it makes no difference to trade whether prices rise or fall ; others, that the difference is slight, and, if anything, is in favour of falling prices. Obviously, if either of these views be right, we may be well content with the present situation. No remedies of any kind are required. This is not the general opinion of the business world ; and on this point I believe the general opinion is right. Let us consider the matter for a moment.

In some of the well-meaning but, as I think, misleading little books, which attempt to compress into a few pages the principles of the great complicated study of economics, you will find the question of money disposed of by a simple metaphor. Money, it is said, is only the counters of the great game of trade. Whether you have much or little money is a mere matter of convenience. It does not affect the result of the game. It is simply a question of carrying more or less of the currency metals in our pockets. If this is so, then the less money we have the better. I need hardly say that this view is an extraordinarily superficial one. There is just a grain of truth in it. If in all countries alike a permanent level of prices were established, then it would matter very little whether that level were high or low. But if one country has a higher level of prices than another, very important consequences result, generally favourable to the country with the higher prices. And, as a matter of fact, the level of prices is not permanently fixed ; we have seen that it is constantly fluctuating. Now, though it may make little difference whether prices are high or low in



the abstract, it makes a very great difference whether prices are steady or variable ; and still more, whether they persistently rise or fall. For practical purposes, then, variations in the quantity of money are of great importance.

If these variations are violent and sudden, they are injurious, for the same reason that all sudden and violent fluctuations are injurious. They unsettle social relations and injure the weak. But whereas other fluctuations may possibly be confined to a single trade, fluctuations in the value of money affect all trades. We have had some memorable examples of such fluctuations, especially in France in 1793, and in the American colonies before 1776. The American statesman Webster, writing in 1780 of the mischief caused in the States by what he calls "the most dreadful calamity of a fluctuating currency," says: "We have suffered *more* from this cause than from *every other* cause or calamity ; it has killed *more* men, pervaded and corrupted the choicest interests of our country *more*, and done *more* injustice, than even the arms and artifices of our enemies."\* Fortunately the mass of the precious metals existing in the world is so large, that no probable variation in their annual supply is likely to produce sudden disturbances of this kind. Such disturbances have usually been the result, as in the two cases mentioned, not of changes in the supply of the metals, but of arbitrary issues of paper money. It is possible, however, even without the issue of paper, for Governments greatly to disturb prices by alterations of the metallic standard ; and the principle is the same in either case, so far as the effects are concerned.

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\* P. Webster, *Political Essays*, 1790, p. 71, &c.



But let us suppose that Governments abstain from irregular operations of this kind, and that violent disturbances of the kind Mr Webster referred to are things of the past. We are still liable to changes arising from the natural demand and supply of the monetary metals. These changes, it is true, are small and gradual in themselves; and if, on the average, they neutralised one another, little harm would be done. But they are usually cumulative; they continue in the same direction for long periods of time; and so changes which from week to week pass unobserved, amount in the course of years to serious dimensions. Now, if all sales were for cash, and all contracts liable to daily revision, these changes in the value of money would matter little. But momentary contracts would be intolerable, not to say impossible; no society could exist on such terms. The great bulk of commercial transactions rest on deferred payments of some sort or other;\* and all the great operations of industry, agricultural or manufacturing, require arrangements extending over long periods of time. It is evident, then, that even gradual changes in the value of money may play havoc with our elaborate economic relations. At any rate, all such changes are thoroughly unjust. Take, for instance, the case of a man who in 1873 borrowed £142. Prices have since fallen to such an extent, that £92 will now buy what £142 would have

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\* Mr John Rae, in an interesting article on *The Natural History of Credit*, which deals with the recent American Consular Reports on the credit habits of the world, states, as the general result, that from seventy to ninety per cent. of the world's business is done upon credit.—*Contemporary Review*, August 1886, p. 254.

bought in 1873. Yet the unfortunate debtor must pay the full nominal sum borrowed ; that is to say, his debt is practically increased more than fifty per cent.\* If, instead of falling, prices had risen in a similar degree, the same injustice would have resulted. But in this case the creditor would have suffered ; the debtor would find his debt lightened by fifty per cent. Can a system which permits of such arbitrary revolutions in the distribution of wealth be rational or tolerable ? I confess it seems to me in the highest degree barbarous and uncivilised. The very earliest economic writings we have were protests against the wrong and mischief caused by such changes. Yet nothing has been done. The whole fabric of monetary contracts is left at the mercy of accident, hanging upon the chances of mining discovery.

What is the apology offered for this singular state of things ? We are told that it involves no injustice, because when people make monetary contracts they know what they are about. If they bargain to receive £5, what they expect is about  $1\frac{1}{4}$  ounces of gold, and this Government undertakes to see that they shall receive. I venture to assert that this highly theoretical view does not represent the common-sense expectation of the public. What the ordinary man who lends £5 expects, is to receive about the same amount of general purchasing power as he lent. It is nothing to him how many ounces of gold this may at any time happen to command. If you say that he

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\* Twenty-five per cent. of this rise may be due to the alteration in the value of the standard itself ; twenty-five per cent. to the effect of the credit cycle, which in 1873 was at its maximum.

might have discovered for himself that Government does not guarantee him this, and that therefore there is no injustice, I still contend that there is enormous inconvenience. The difficulty of foreseeing what your engagements may involve you in becomes almost insuperable. Contracts, it is true, might be left open to adjustment according to the variations in the standard. But it would still be difficult to make these adjustments really fair. And as there must be two parties to a bargain, it is not enough to satisfy yourself. You have also to persuade the other party to take your view. The serious troubles that have arisen of late in regard to the wages bargain, will shew that it is easier to talk about such adjustments than to make them. It may be allowed that it would not be a simple matter to establish a really uniform standard of value. But the practical question is, whether it would not be a far simpler matter than the establishment of all the adjustments which are required when the standard is allowed to vary.

I think, then, there can be no doubt that justice and convenience alike would lead us to aim at a uniform standard of value. But supposing such uniformity cannot be attained, and that prices must either rise or fall, is there anything to choose from a public point of view between these two movements? It seems to me that there is ; and that the balance of social advantage is in favour of rising prices. Whichever way prices move, the public are likely in one sense to lose. The middleman is almost certain to gain at their expense. When prices are rising, he exaggerates the amount of the rise, and raises retail prices in more than due proportion ; when prices are falling, he does not give the

public the full benefit of the fall, and delays his reductions as long as possible.\* Compared with the dealers, the public are always the weaker class, and lose when customary prices are disturbed. But their loss is greatest when prices fall. When prices fall, creditors gain at the expense of debtors. That is to say, the retired and inactive classes gain at the expense of the active and able-bodied ; the owners, at the expense of the employers, of capital. Observe, too, that the greatest debtor is the public itself, which owes the fund-holders some £740,000,000. By the fall in the value of money since 1873 this enormous debt has been practically increased in weight twenty-five per cent. The effect is the same as if some £180,000,000 of fresh debt had been incurred. Wherever fixed payments have to be made, the same thing happens.†

It may be said that as wages are comparatively fixed payments, the wage-receiving class at all events will gain by a fall of prices. Their wages will not fall so fast as prices do ; just as when prices rise, the rise of wages is sometimes delayed. There is some truth in this view. If employment were not disturbed, the wages class, and still more the salaried class, would be gainers by a fall of prices. But here we come to the most serious effect of falling prices. They depress industry and trade. The very language of the markets

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\* See the example of Smyrna raisins, quoted by Mr Goschen in his *Manchester Address*, pp. 24, 25.

† One of the principal causes of the rack-renting of Ireland in 1830-40 is said to have been the fall of prices which set in about 1820. Rents remained the same, while the prices of produce fell.

bears unconscious testimony to the effect on trade. All the terms used to denote a state of rising prices are favourable ones. When prices are maintained, the markets are "buoyant," "better," "firm," "fair," "strong," and "improve"; when prices decline, they are "languid," "depressed," "slack," "drooping," "lifeless," and "dull." It is the same with industry. And the reason is clear. The expansion or depression of trade depends upon the estimate formed by the employer. Falling prices injure him in several ways. He loses as one who has to make fixed payments, whether for money borrowed, for rent, or for rates and taxes; he loses as a buyer of raw material, whose value falls in the process of manufacture; he loses as a holder of stocks of finished goods, which depreciate every day he holds them; he loses as one who pays wages and salaries, which he finds it very difficult to reduce. It comes to this, that when prices fall his receipts diminish, but his expenses are to a considerable extent fixed. He therefore loses heavily by the change. It is no wonder, then, that he curtails production, and waits for demand instead of anticipating it. But this means a serious restriction of employment. I say serious, because if the restriction is only five per cent., it means not that each of the employed obtains five per cent. less employment, but that five per cent. of the employed, with all who depend upon them, are thrown out of work. The gain of the employed is largely swallowed up in assisting the unemployed. Not only so, but these men being thus deprived of their usual purchasing power, the demand for the products of other trades falls off. Thus the mischief



extends, and what we call a general depression of trade sets in.\*

Even a fall of prices, of course, is not an unmixed evil. The depression to which it leads gives time for reflection. Attention is turned from details to principles ; from the quantity of the product to the process of production. Necessity becomes the mother of invention ; small profits lead to large economies. The ordinary or popular form of speculation is heavily handicapped ; falling prices do not suit operators for the rise. Thus while the expansion of trade is arrested, what trade remains is likely to be more solid. All this is true, but it should not count for much. We might as well argue that plagues are good things, because, as they are more fatal to the sickly than to the strong, the average health of those who survive them will be high. There are few things for which something cannot be said. On the whole, the position of industry struggling with falling prices seems to me fairly comparable to that of a man rowing against a stream. It is good for the muscles, no doubt, and it keeps the attention alert. But it involves a great and unnecessary strain ; and there are few who would not prefer level water, even at the expense of an occasional delay at the locks.

I think I have now shewn good reason why, if it is at all practicable, some measures should be taken for dealing with these changes in the value of money. It remains to offer a few suggestions, which I do with all

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\* See for admirable descriptions of the way in which this disease of depression spreads : Bagehot, *Lombard Street*, pp. 125-128 ; F. A. Walker, *Money, Trade, and Industry*, pp. 126-136.



reserves, as to some of the courses which we might adopt.

It would be much, in the first place, if the actual movement of prices was clearly ascertained and widely published. So long as prices are at the mercy of the action of Governments and the yield of the mines, we could never positively predict the course they would take. But much would be gained if it were generally recognised that such a thing as a continuous and steady fall exists, and that we are not merely at the bottom of one of the ordinary ten-year oscillations. Idle and baseless expectations of a recovery, such as we commonly find held by business men, would then be swept away, and the facts faced fairly. The fall might be to some extent discounted. Again, arrangements might be made by which the movement of prices might be compensated. Wages and salaries might be adjusted by sliding scales. Mortgages, settlements, long loans, rents, and royalties might similarly be made to vary with the value of money. And thus the tendency of a fall of prices to depress industry might be largely counteracted. As a basis of these adjustments, we should require what is called an "index number," which amounts in substance to a measure of the change in the value of money; and this index number must be officially or semi-officially ascertained, in such a way as to be received with absolute confidence by the public. It is probable we should find that for different purposes different index numbers would be required. These, however, might be provided accurately enough for practical purposes, and without any great difficulty and expense. It is the very least that should be done.

This solution seems to me, however, very insufficient and unsatisfactory. It would involve innumerable adjustments, some of which would certainly cause friction as well as expense. It would greatly complicate bookkeeping. Most commercial payments, though deferred, are only deferred for short terms, and it would be difficult to adjust these at all. It would evidently be far better to prevent the need of adjustments. Suppose that the yard measure in common use varied from day to day with the temperature, to the great inconvenience of trade ; and that some one were to propose to ascertain the variation for each day, in order that prices might be adjusted to correspond with it. I think you would say that the idea was unnecessarily ingenious. The obvious remedy would be to compensate the measure itself, as you compensate a balance-wheel ;\* or else to choose a measure which did not vary at all. The difficulties are greater in the case of money, because every monetary question is necessarily an international one ; but the principle is the same, and it must sooner or later be admitted. Those who advocate a uniform standard of money to-day are often called "currency quacks." You might as well say that those who first determined the mean solar day, on which our time measures depend, were quacks. I feel sure that the Macaulay of the future will point to our present money system

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\* So long ago as 1856, Mr William Cross ably advocated a monetary standard corrected by means of an index number. See his *Standard Pound v. the Pound Sterling* (Aberdeen, 1856).

Another method for securing the same object has recently been proposed by M. Walras.

as a most triumphant proof of the barbarism of the nineteenth century.

But public opinion moves slowly, and is nowhere more conservative than in currency matters. It will probably be a generation, at least, before the great difficulties connected with the establishment of a uniform international standard of value are successfully encountered. Meanwhile industry is suffering; and the question arises whether some practical relief cannot be given, without waiting for an ideally perfect system. Several schemes of this kind are now before the public; the object of them all being to lessen the strain on gold, and thus arrest the fall of prices.

The first place among these schemes belongs to the proposal to re-establish bi-metallism. It was the collapse of bi-metallism that originally produced the fall of prices; and there can be no doubt that its restoration would cause prices to rise. Mr Giffen urges that the rise would only be temporary; in which case it would merely be a new disturbance, and a fresh source of mischief. To me it seems that, while the supply of silver is increasing at its present rate, the revival of bi-metallism would permanently maintain prices. It would also economise money, by ultimately leading to international money, and lessening the necessity for bullion payments. I cannot, however, pretend to argue out the question here; I can only offer you my opinion for what it may be worth. You will find an excellent and clear exposition of the whole matter by Professor Nicholson in his pamphlet on *The Silver Question*, with the general result of which I entirely agree.

Had this country shewn the slightest disposition to give any assistance, I think we cannot doubt that

bi-metallism would long since have been re-established. But since 1816 English opinion, or perhaps I ought to say English prejudice, has been generally hostile to that system ; and at the present moment it is still the great obstacle in the way of its resumption. Other proposals have therefore been made which do not involve the adoption of the double standard, and which it is thought might have more chance of acceptance. It has been proposed to issue £1 notes in England (on the existing system of issue), and so set free a certain amount of the gold circulation ; but this scheme seems to involve a certain risk of lessening the coin available for reserves. Lord Grey has also proposed to issue £1 notes on a silver basis, thus utilising silver at the same time that gold is set free. And M. Chevassus has proposed to make international payments by silver warrants, based upon silver bars lying in the great national banks.

All these proposals have one great merit, which attaches, I think, especially to the proposal to issue £1 notes. They tend directly not only to relieve the strain on gold, but to replace a metallic by a paper circulation. They would thus immensely facilitate any further step in currency reform ; whether in the direction of bi-metallism, or of a regulated standard. Looked at in this light, then, there is much to be said for such proposals ; and in any case they are signs that public opinion is at least roused to the importance of the subject. But if we are to regard them as final, they must be condemned as inadequate, and as open to Mr Giffen's objection mentioned above, viz., that their effect would only be temporary. No radical cure can be obtained by measures of this kind. The

monetary question can only be finally solved by the accord and concert of the civilised nations.

Of the remaining causes of fluctuation I can only speak in the briefest terms. The next in order is the ten-year variation of prices known as the credit cycle; the only one of the series of periodic commercial fluctuations described by Jevons which occasions much practical disturbance to industry. It was once described by Lord Overstone, in terms often since quoted. "Trade," he said, "revolves apparently in an established cycle. First we find it in a state of quiescence,—next movement,—growing confidence,—prosperity,—excitement,—over-trading,—convulsion,—pressure,—stagnation,—distress,—ending again in quiescence."\* What are the causes of this great commercial tide? It seems to arise, in the first place, from a general predisposition to disturbance, characteristic of modern industry, and due to its high degree of organisation. This sensitive condition is partly the effect of the very elaborate degree to which division of labour is carried, and of the intricate dependence of trades on one another which results. Still more, I think, it is due to the extent to which we have carried the development of credit. We have erected a very vast fabric of credit upon a narrow basis of gold. It is probable that if one-thirtieth part of the obligations to pay in gold which exist were suddenly presented for payment, a financial crisis would ensue. Such a system is not necessarily unsound. It is like railway travelling, which offers infinite possibilities of accident, but which is very safe

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\* *Reflections on Horsley Palmer*, 1837, p. 44.



when the management is good. Our credit system is secure enough so long as the conditions it assumes hold good ; but it is necessarily very sensitive to any alteration in those conditions. And the same may be said of our industrial system. Division of labour implies that the direction of industry is more difficult ; but it does not necessarily involve periodic industrial crises. The general sensitiveness of modern industry is something we cannot hope to remove. We shall always have to reckon with it. It is the unavoidable price we have to pay for the advantages of high industrial organisation. But, in spite of this sensitiveness, actual disturbance might be kept within harmless limits, if it were not for the misdirection and unintelligent development of industry on the one hand, and rash speculation, fostered by bad banking, on the other. The first leads to commercial depression ; the second to financial crisis. Limited liability enterprise seems to be an active factor in both kinds of disturbance, leading, as it so often does, to reckless competition, and irresponsible, inefficient management.\*

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\* The President of the Institute of Bankers (Mr Tritton) stated in his *Inaugural Address*, October 21, 1885, that "the undue stimulus and excitement of 1879-1882 [in the shipping trade] was, in no small degree, the result of the introduction of the principle of limited liability into shipowning."—*Jour. Inst. Bankers*, 1885, p. 439.

Much evidence to the same effect was given before the Royal Commission on Trade. See, for instance, Mr Albert Simpson's evidence.—*Second Report, Part I. of Appendix*, pp. 378, 379.

This result was predicted, before the passing of the Companies Acts, by M'Culloch :—"On the whole, nothing but mischief can be legitimately anticipated from the establishment of partnerships with limited liability, or *en commandite*. It was



Among the remedies for such disturbing forces, I would first mention sound, prudent banking, with all that this implies. The banker occupies a position of great influence in this matter. He is very centrally placed, and possesses wide information of the state of trade ; and he largely controls the movements of capital. It is only fair to bankers to notice that they steered us safely through the depression of 1878 without anything deserving the name of a financial crisis, such as occurred in previous depressions. It has been said that our escape was partly due to the premature arrest of the rise of prices in 1873, caused by the demonetisation of silver ; and this may be true. But something must be placed to the credit of good banking. There is still room for improvement in our banking system. We want a clearer distinction between real and fictitious bills ; stronger reserves ; and a more elastic system of note issue. But we have made great progress already ; and there are signs in the increasing organisation of banks, both here and in the United States, that new advances are to be expected. In regard to industry, much is to be hoped from a better knowledge of the state of trade, and of the circumstances of the consumer. Trade organisations and trade journals are doing something in this way. It would also be wise to

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not by the aid of the principles which they involve, by shirking responsibility and evading the risks inseparable from all undertakings, that we attained to our pre-eminence in character, in wealth, and in manufacturing and commercial industry. But are we well assured that the adoption of a contrary system will not mark the era of our decline?"—J. R. M'Culloch, *Considerations on Partnerships with Limited Liability*, 1856, p. 26.

study small economies, rather than to snatch at excessive and rapid gains. The use of shorter credits in business, wholesale and retail, is also a healthy symptom of the times ; and there should be smaller facilities for heavy speculation on small margins. Some alterations must certainly be made in the law relating to joint-stock companies. We want much fuller information in regard to the capital actually subscribed and borrowed. Liability should be better proportioned to responsibility. If directors were liable to the extent of four or five times their share interest, the management would become a little more prudent ; and if profit-sharing were introduced in arranging the salaries of the employed, there would be less waste and defalcation.

Finally, if, after all such reforms, there still remains a certain cyclical movement in trade, arising perhaps, as Jevons thought, from the changes in the tropical harvests, we can at all events discount this movement to a great extent. Public works, and permanent improvements of all kinds, should be reserved, as far as possible, for the years when prices are low. The railways are said to have followed this principle in some degree. It might even be possible to do something more in the way of taking contracts for long terms of years at fixed prices. The principles of reform, then, are the same as in the case of variations in the standard of value. We must lessen the fluctuation, so far as this is possible ; and so far as it proves to be unavoidable, we must ascertain and publish its amount, and discount its effects.

I must pass on to consider a third class of fluctuations. So far we have only noticed the compound

movement of general prices, made up of the alteration in the average value of money and the credit cycle. We must now notice those movements of price which result from dealings in the markets. It is these which give the price curves their irregular ragged outline ; and which I have represented graphically by the third line on the left hand of the chart. The small indentations at A A' stand for the ordinary higgings of the market ; the deeper notches at B B' for the effects of "corners" and "rigs." I have already observed that if these disturbances originate in the general money market they will affect all the special curves in a similar way, though not necessarily to the same extent. But they may be confined to particular markets ; and thus will give to each of the special price curves a character of its own. Now what are we to say about the general working of our great markets, so far as the public good is concerned ? Two extreme views are frequently expressed upon this subject, with neither of which I entirely agree. You have the optimistic view, on the one hand, as held by Adam Smith. His defence of the trader is well known. The trader was a man who followed his own interest, without thought of the public good ; but his interest, Smith thought, was always the same as that of the public, at all events where the markets were large. Consequently in following his own interest he necessarily promoted the welfare of the public ; and any attempt to regulate his action must either be useless or hurtful. Men of socialistic leanings usually take a very different view. They dislike all markets, as the most typical and pronounced forms of individualism, and denounce dealers as the parasites of industry ; while the money market,

as the largest and most influential of all, comes in for an especial share of denunciation. Thus Mr Rae tells us that "Schaeffle, who is not only an eminent political economist, but has been Minister of Commerce to one of the great powers of Europe, says that when he got acquainted with the Bourse he gave up believing any longer in the economical harmonies, and declared theft to be the principle of modern European commerce."\* I think this view is exaggerated. I agree with Mr Rae that the Socialists are too apt "to take the Bourse to be the type of capitalistic society, and the fraudulent speculator to be the type of the Bourse." No doubt personal relations, old commercial traditions, and public opinion, count for less in the world of finance than in the smaller and more local markets; and irresponsible speculation of the gambling type certainly flourishes there.† But the power of speculators to injure the public, even on the Stock Exchange, is generally overrated. There is a great deal of speculation, the whole, for instance, of what is called *arbitrage* business, the direct effect of which is to level prices. Deliberate attempts to disturb prices form the exceptions in the great mass of market dealings. And we must admit that in some respects the great markets are marvels of modern enterprise; and that in these respects the Stock Exchange stands first of them all. That £300,000 of consols can be sold in a day by a single broker without altering the price one-eighth

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\* John Rae, *Contemporary Socialism*, pp. 376, &c.

† The market itself has been the instrument rather than the source of fraudulent finance. The business of "promotion" must not be confused with that of dealing. The promotion frauds were concocted outside the market proper.

against the seller is a wonderful fact.\* It could not be done but for the aid of speculation; but it means an immense public convenience. The existence of powerful markets of this kind provides a constant and accurate measure of the value of all kinds of property. The exactness of this measure can be tested by the "closeness" of the price,—*i.e.*, by the difference between the buying and selling price. Every one knows that on the great wholesale markets this difference is sometimes as small as one-fourth or one-eighth per cent. Compare this with the difference in the buying and selling price of a painting, an old book, or an article of furniture, and you will be able to form some idea of the advantages we derive from great and well-organised markets. They add greatly to the certainty and calculability of commercial transactions; they increase the fluency of capital and the flexibility of industry; and they unquestionably tend so far to realise the ideal of Quetelet, to keep the fluctuations of price within narrower bounds.

This is the favourable aspect of the modern market. It is the result of the great ability and shrewdness of the dealers, the immense capitals they control, and the keenness of their competition. But there is another side to the picture. With the best intentions mistakes are often made. Adam Smith's tacit assumption, that men always follow their own interests, is often very wide of the mark. Their action is apt to be affected by ignorance, by habit, and by over-haste to be rich. A great merchant once remarked to me that men of business follow one another into a plausible invest-

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\* *Evidence before London Stock Exchange Commission, 1877*, Mr R. Thorp, Q. 5385, &c.



ment as blindly as a flock of sheep scamper after their leader over a gap in the wall. Or, as another City friend put it, "they seem to run in blinkers." They understand pretty accurately what lies just in their way ; but as soon as they travel outside the daily routine, or are brought face to face with strange circumstances, they are at sea, and just as liable to be the victims of fraud or mistake as any one else. Hence miscalculations are made and prices disturbed. Again, the very smallness of the profits on ordinary dealings, and the keenness of the struggle for business, leads some into a kind of speculation which is either deliberately fraudulent or criminally reckless. The attempt is made to gain profits not by levelling, but by creating disturbances of prices ;\* and though, fortunately, these attempts often result in the collapse of the conspirators, they generally also injure the public. The memories of the Glasgow Iron Ring, the American Gold Ring, the London Coal Ring, and the Liverpool Cotton Corner, will be still fresh in the minds of many of my hearers. In Russia they appear to deal with manœuvres of this kind in a summary and effective way. The price of corn having been artificially raised there in November 1880, "Count Melikoff,

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\* "The irresponsibility of a great portion of the operators, unknown to the public, is continually setting home and foreign markets in courses for which no intelligible reason can be found by legitimate traders, and creating universal embarrassment and loss ; but when to this is added operations of a gigantic nature, in which one man or a 'ring' deliberately sets to work to manipulate markets, effects are produced the disastrous character of which cannot be measured, for the influences are so widespread, and touch so many various interests throughout the world."—Halked, *Nineteenth Century*, October 1881, p. 535.



in the course of an interview with prominent grain merchants, hinted plainly that if prices were made too exorbitant some of them might have an unexpected opportunity of visiting the outlying parts of the Empire.\* It is natural to give vent to the indignation which every honest man feels at speculation of this immoral kind, and to regret that the most gigantic attempts at obtaining money under false pretences, which so seldom come within the reach of the criminal law, cannot be dealt with after the Russian fashion. But in a free country offences must be defined before they can be punished; and, as Bentham observes, there are many offences which are not made crimes for the sufficient reason that they cannot be defined with the clearness necessary to secure a conviction of the offender. That seems to be the case here. After carefully examining the question, I do not see how, for practical purposes, criminal can be distinguished from beneficial speculation. But very much may be done indirectly which would make such speculation very difficult. In all commercial statements there should be the fullest publication and guarantee of material facts. We should then be able to avail ourselves of the ordinary law against fraud, where these facts had been misstated or concealed. And all market transactions should be public, both as to quantities and rates.† Further, to secure these and other ends,

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\* St Petersburg telegram, *Standard*, 9th November 1880.

† "The Socialist demand for commercial statistics is to be approved. They would benefit everybody but the dishonest dealer."—John Rae, *Contemporary Socialism*, p. 378.

Statistics check gambling. Men do not bet on a certainty; and the more commercial forecasts are reduced to a science, the less room there is for the gambler.

markets should be organised, and business on them conducted according to rules framed by the persons interested, and approved by the Board of Trade. With these reforms, I do not think much industrial disturbance could be caused by the dealings in markets. Speculation may possibly be on the increase ; but ordinary speculation more frequently levels than disturbs prices. Upon the whole we may expect prices to be rather more than less regular, so far as the effect of market dealings on them is concerned. The tendency to greater steadiness will increase with the size of the markets, the capital and the intelligence of the dealers, and the publicity that is given to market transactions.

We have yet to deal with another class of disturbances in our rapid review of the causes and remedies of price fluctuations. I have said that each commodity has its special price disturbances, over and above those which it shares with other commodities, and which are due to movements of general prices. Some of these special price disturbances originate in the special markets for the commodity, and these we have already considered. But the most serious of the special disturbances, and the most difficult to remedy, are those which are connected with the supply and demand of the commodity, or, as I have expressed it on the chart, with the conditions of its production and consumption. It remains, however, briefly to consider this last group of price changes.

I have already mentioned, as an illustration of disturbances of this kind, the tendency to a rise in the price of tin, due to the gradual exhaustion of the old

sources of supply and the increasing difficulty of discovering fresh ones. For an instance of the opposite tendency, I might have taken the steady fall in the price of cotton piece goods, due to the progress of invention in cheapening manufacture. These two examples illustrate two great general laws affecting the production of all kinds of commodities. So far as there is a scarcity of the requisites of production, whether of raw material or of skilled labour, increased supplies will only be obtainable at increased cost. This is what economists call, in their technical language, the *law of diminishing returns*. Now, in the general progress of wealth and population, the demand for a commodity will naturally increase. So far then as its production is affected by the law of diminishing returns, its price will rise. On the other hand, if the difficulty in production is one chiefly of manufacture, it is certain, in the progress of society, to be constantly lessened by the better direction and organisation of labour, so that increased supplies will be obtainable at lessened cost. This is what economists term the *law of increasing returns*. So far as the production of a commodity is affected by this law, its price will tend to fall. Now both these laws affect the production of every commodity, but in very different degrees. Sometimes the difficulty of manufacture is trifling, and the scarcity of material of first importance ; sometimes the material is practically unlimited, and difficulty of manufacture the chief consideration. In the first case, the law of diminishing returns gets the upper hand, and price rises relatively to other commodities ; in the second case, the law of increasing returns predominates, and price falls. Thus the prices

of leather and indigo have risen about fifty per cent. since 1850, and the price of tobacco more than one hundred per cent ; while the price of cotton yarn has fallen nearly twenty per cent.

If you will look once more at the left-hand chart, you will see an attempt to illustrate by a diagram the effect on price of changes in the conditions of production. I have taken the case of a commodity such as meat, for instance, where, speaking generally, we should expect the law of diminishing returns to get the upper hand, and price therefore to rise as population increases. I have indicated that rise of price by the line A B G. But at B (suppose), new sources of supply are discovered ; Australian and American meat become available to our market in the tinned form, and bring down the price of fresh meat to C. From this point the price resumes its upward movement. But perhaps at D the progress of invention makes it possible to import meat in joints, of equal quality and freshness with the home-grown article. Price falls again to E, before resuming the inevitable ascent. And thus, by the effect of discovery and invention combined, we find that the price, which would otherwise have risen to G, has been so interrupted in its tendency to rise, that it has actually fallen to F, or below A, the point from which it started.

Similar changes in price are brought about by changes in the conditions of consumption or of demand. Such changes are illustrated in a similar way in the last of the diagrams on the same chart. Thus, if we suppose no alteration in the conditions of supply of such an article as wool, for instance, we should

expect that as population increases the price of Bradford goods would rise, as indicated by the line A B G. But at B perhaps an alternative product, say a French cashmere, is introduced, and the price falls to C. After resuming its rise to D, a new market may be discovered. By judiciously baiting the untutored taste of the Kaffir with a striking arrangement of the brightest hues in the spectrum, he may be made a large purchaser of English woollen rugs; the price of woollen goods rises still more sharply to E. At E suppose a change of fashion takes place; Bradford goods are "not worn." I will not attempt to penetrate the mysteries of the feminine mind, and to hazard a guess at the causes competent to bring about such an event as this. Like earthquakes, and other inscrutable dispensations of nature, such changes of fashion do take place. There is no doubt about their effects, at all events. In this case price would fall, as to F, and perhaps more sharply than I have represented it in this diagram.

I do not pretend to have here given an exhaustive account of the changes of price due to special conditions of demand and supply. In particular I have not noticed such changes as are caused by the action of Governments, whether in controlling consumption by police prohibitions, or in affecting supply by protective tariffs, or by taxation imposed for revenue purposes. What I have said may serve to indicate the *kind of effects* falling under this head. It is evident that they are extremely difficult to deal with. There must always be sudden advances in invention, unexpected discoveries, and unaccountable changes of fashion. But I think these necessary disturbances should be socialised, distributed in their effects, so that they



should not fall with such crushing severity upon individuals. The harvests vary now as much as they ever did ; but whereas in barbarous states of society the effect of a bad harvest was severe and localised, causing absolute starvation in limited districts, the effect of civilisation has been to distribute the pressure, so that it is easily borne, and sometimes escapes notice. Something of the same kind seems to be required here. When, by an introduction of free trade, or a new invention, bringing with it immense gain to society as a whole, an industry is extinguished, and numbers of honest men reduced to destitution which is no fault of theirs and which they could not have foreseen,—there seems to be a clear case for some assistance from the public, which has gained by the change, to the victims who have been ruined by it. It was suggested more than fifty years ago that, in the case of inventions, the necessary funds might be derived from a royalty on their use ; and Adam Smith recommended that where a large industry might be disturbed, free trade should be introduced only by slow gradations. Neither suggestion suited the selfish individualism of modern industry, and neither was adopted. Again, though taste and fashion will always change, there does not seem to be any reason why they should change so suddenly and peremptorily. The cheap and immediate satisfaction of every unreasonable whim of the consumer is not the sole purpose of our economic organisation. The old guilds had their faults ; but one of their merits was, that they made rapid changes in the amount and kind of employment less practicable. And the trade unions have done much to grapple with this difficulty, in the



organised trades, by their regulations in regard to apprenticeship. It must not be supposed, either, that the remarkable changes in the demand for commodities are wholly owing to the mere blind caprice of fashion. Changes of fashion are often due to the steady deterioration in the quality of articles which sets in the moment they become open to the fierce and unscrupulous competition of the open market. And many of the changes in demand are such as might have been foreseen by intelligent persons, had there been a proper collection of statistics of consumption, and a careful estimate of the variations in the purchasing power of the available customers.

To meet these mischiefs, then, we seem to want organised trade action\* to control the destructive competition of the more grasping individuals, and better information to direct those who lead. The general character of the remedies required is the same in the case of these more special and intractable causes of disturbance as in the case of those which arise out of defects in our monetary and commercial mechanism. In both cases alike, action has been too individualistic and too ignorant. There has been too much isolation in currency matters, as much as in industry ; and in both alike too little publication, and

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\* I do not say *nothing* can be done by the individual without organisation. Thus Mr Rathbone, speaking at the twenty-second annual meeting of the Liverpool Central Relief and Charity Organisation Society, 21st December 1885, contended that by a little thoughtfulness and system on the part of the large shipowners more regularity and continuity might be given to dock labour, and much distress prevented ; and no doubt the same thing is true in all trades.

consequently too little understanding, of the essential facts. Thus, as I hinted at the beginning of this lecture, we seem to be brought at all points to the same conclusion. Future economic reform must proceed on the two lines of Organisation and Publicity.

### ORGANISATION AND PUBLICITY.

Here, then, after our discussion of the various causes of industrial disturbance, we get to two fundamental principles, which sum up and underlie a whole host of detailed remedies, and present us with something like a general policy of reform. I do not say the policy thus indicated is a new one. Social evolution is always continuous ; and no absolutely new departure can be a stable and progressive one. To a certain extent the policy of which I speak has already been put into practice ; but I do not think it has generally been consciously avowed. And as it conflicts in a marked way with the practice of the previous generation, and with many of the maxims, derived from that time, which are currently received to-day, I wish, in conclusion, to say a few words upon its main features, upon its urgency, and upon some of the prejudices which stand in the way of its more general acceptance.

It seems to me, then, that the social body requires a little bracing up. It wants a moral tonic. There has been too little regard for social order and social justice, too much anarchy and disintegration. We have been suffering for a century from an acute outbreak of individualism, unchecked by the old restraints, and invested with almost a religious sanction by a certain soulless school of writers. The narrowest

selfishness has been recommended as a public virtue ; and the debasing pursuit of private gain has become the all-absorbing motive of action. In the United States, as was natural, the movement reached its completest development ;\* and it would seem that if pecuniary success is not absolutely accepted there as the touchstone of merit, it is at least an avenue to every form of public honour, and a justification of the most questionable forms of commercial dealing. The tendency has been to sweep away everything which could limit or control the efforts of the individual to fill his own pockets, at whatever cost to the less successful ; and the results are what might have been expected. There has been an immense outpouring of energy, and a marked development of enterprise. Industry and trade have worked at a degree of high pressure previously unknown, and population and wealth have increased ; but with all this there has been enormous waste, both of men and material, unheard of suffering and squalor, debasement of commercial principle, adulteration of products, and degradation of taste. Industry has made great strides in its methods and results under the fierce competition. But, after all, it is not to this anarchical struggle that we owe the greatest achievements of the age. It will be distinguished in history not so much for the rapid increase of material products, as for its remarkable discoveries in natural and physical science ; discoveries as little due to the thirst for gain as they were productive of gain to their authors. And the only interest

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\* It is in the United States, too, that the reaction seems to be setting in most decidedly ; and it is quite possible they may be destined to take the lead in the reorganisation.

which will sustain the student in his depressing studies of the condition of industry in the first half of the century, will be the tracing of the germs of its re-organisation in the latter half.

So at least it appears to me. Not that I agree with those who hope to displace competition by some system of State or collective administration. I cannot think that those who speak so confidently of a change of this kind can have studied the complexity of modern industry and the intense energy of self-interest as closely as they have the incidental evils to which these have given rise. The substitution of State administration for private enterprise would be the wildest and rashest of experiments ; and all that we know of human nature and modern State action, points to the certainty that the experiment would be a disastrous failure. The force of competition is immensely powerful, and at present quite indispensable. The very existence of multitudes would be endangered if the energy of industrial production were diminished twenty per cent. But it is impossible to suppose that the loss caused by the withdrawal of the stimulus of competition would be as small as this. Indeed, if the power of the State organisation by which it was replaced were even half as efficient, half as pervasive, it would be a grinding tyranny over the individual, the like of which has never yet been seen ; for it would be the tyranny of the majority, and therefore a tyranny from which there could be no escape, no appeal. Nor can I see any reason to believe that the State tyranny would be as intelligent as the present direction of industry. It is safe to say that it would inevitably be less progressive.

Yet public control in some form or other is certainly required. Public interests must be defended against private ignorance and greed. Competition is a rude force of the greatest value ; but it must not be allowed to waste its unregulated energy in the destruction of men and material. It must be controlled, and made to serve the interests of society, just as we control fire and water, and bend them to our purposes. It is as foolish to give the rein to such forces, as altogether to discard their aid. We are all by nature sufficiently disinclined to exertion, and therefore we cannot afford to throw away a great social motive power. But neither can we suffer it to run riot, to the injury of the common weal. The true policy is to turn every force at our disposal to the best advantage ; to utilise it by due control.

In what way, then, is this general control to be exercised ? To a certain extent, no doubt, by the State, —by the Legislature, the Departments, and the Commissions. It seems to be as proper for the central government to control private administration, as it is generally unwise for it to undertake direct administration itself. Even where the control may be directly exerted by subordinate authorities, there must always remain a right of appeal to the State, as the ultimate and supreme expression of public opinion. But it would be a mistake to burden the State too much with the duty of direct control. All that is necessary is that the control should be exerted in the public interest, with due intelligence and with practical efficiency. These conditions secured, the more we can decentralise control the better. It may be applied by voluntary associations, by trade organisations, or by municipal



authority; perhaps best and most effectively of all, by educated public opinion. In any case, however, it will require some kind of organisation, to give it expression and effect; and publicity, to give it guidance and criticism, and preserve it from corruption. It comes to this, then, that Competition must be moderated by Control, and that the conditions of the exercise of Control are Organisation and Publicity.

The organisation of industry has always been a strong point with the Socialists; in the sense, at least, that they have always insisted upon its necessity, and advocated the most ambitious and pretentious forms of it. Thus Lassalle looked forward to a time when, the State having acquired the whole of the instruments of production, the activity of all the different branches of industry should be as perfectly regulated as the activity of different stages of manufacture in the same workshop. Ideals of this kind may be useful; it is well to aim high. But their authors do not help us much to attaining them. Lassalle, and men of his kind, in their eagerness to reach a higher level of social progress, are apt to make a spring for the upper rounds of the ladder without climbing the necessary intermediate ones, and to find themselves at best only where they were before. All the writings of the Socialists put together, have done less towards the positive reconstruction of industry, than the single, modest, but practical step taken by the English trade unionists. It is to some of these minor and preliminary steps I wish to call your attention now; to the direction that actual advance has already taken, and is likely to take in the immediate future.

Time will not allow me to say much of the steady



development in the organisation and action of the State ; though this has a strong influence on industry, directly and indirectly. I will only observe, that in spite of the most jealous desire to restrict the sphere of State administration, the various Civil Services steadily increase in numbers with the increase in the numbers and the requirements of the population. This means, that an increasingly large number of persons obtain practically constant employment. Jevons indeed very curiously refers to this permanency of employment as one of the disadvantages of Government management. "Officers of the Government," he says, "are seldom dismissed when once employed, or if turned away they receive pensions. Thus when the Government establishes any new work, it cannot stop it without great expense." Expense of money to the public, Jevons no doubt means. And why not? Is not the alternative expense of suffering to the men discharged? Why is the pecuniary loss to the taxpayers of more importance than the ruin and misery of the employed, liable in unregulated private industry to be deprived of their living by every change in production? The interest of the producer is as important as the interest of the consumer ; and it is possible that in the pursuit of mere cheapness more vital objects may be sacrificed. While, therefore, we may for other reasons not desire to see State employment unduly extended, we must reckon as a positive advantage the increased regularity of employment which results from it.

The advance in the controlling function of the State is equally marked. The powers of the Board of Trade are being constantly increased. The factory inspec-

tion under the Factory Acts is one of the greatest triumphs of English industrial reorganisation. And the constitution of the various Railway, Land, and Charity Commissions is another significant sign of the times. It may be said that this form of State action has no direct bearing on regularity of employment. But it indicates the tendency to reorganisation to which we must look to secure this regularity. And further, by its influence on the health, comfort, and safety of the worker, it may indirectly have a very powerful effect on the constancy of his earning power.

Similar observations apply to the extension of municipal action, which is another striking feature of the age. The various corporations employ large staffs of officials, curators and workmen, most of whom are in permanent employment; and they regulate the industry of numbers more. It is open to them, by a judicious distribution of the necessary public works, according to the condition of the labour market, to do much to balance the fluctuations of employment. And to similar local bodies is entrusted the control of that legal charity which is the ultimate refuge of those who are ruined by such fluctuations. As the growing importance of municipal administration is more fully recognised, we may expect, therefore, that from this quarter much may be done to remedy irregular employment.

I might dwell, too, upon that unconscious organisation of industry which is the result of the increasing size of private undertakings, and of which the great English railway companies form the most conspicuous example. It is notorious that steadiness of employment, and general improvement in the condition of

labour, usually increase with this increase in the magnitude of the concerns. The comparative regularity of employment on the railways was specially remarked by the witnesses before the recent Commission on the Depression of Trade.\* There is a reason, quite apart from the peculiar nature of the industry of transport, why this should generally be the case. The larger the concern, the more powerful is the public opinion of the employed. The more elaborate the organisation, the more indispensable are the skilled and trusted staff. Great builders take contracts at a loss rather than break up an efficient body of workmen. When the rank and file are dismissed, the staff of foremen is generally retained. The more skilled the body of workmen become, the more they will share in this advantage. The increase of fixed capital, too, is another pledge which the progress of industry gives to steadiness of employment. The greater the proportion of capital to men employed, the more constant employment becomes the interest of the employer.

It should not be forgotten too, that the steadily increasing sums devoted to public uses, whether to found hospitals, schools, churches, museums, libraries, parks, or what not, involve the employment of a practically permanent staff; and that in this way also regularity of employment is promoted. I might also dwell on the growth of Co-operative industry, with its well understood and practically assured market, which ought to be another powerful influence in the same direction; as well as on the hoped-for growth of Profit-

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\* *Royal Commission*, 1885, II., Part II., p. 98, &c.

sharing, one of the many advantages of which is, that by lessening the master's gain in exceptionally prosperous times, it lessens that reckless influx of capital which usually sets in at such times, and often ends by ruining the trade and throwing the workmen on the streets.

But I must pass on to consider whether there is not room for deliberate organisation of a new and somewhat different kind. There are signs that we may soon get, what is certainly much to be desired, organisations which, with allowance for the altered conditions, might do for us something of what the guilds did for the mediæval industries. I should be the last to deny that the trade unions have rendered immense services to the working class. But I do not think they are the best conceivable form of industrial organisation, though they may have made better forms possible. I was delighted to hear, on reaching Edinburgh, that Mr Burnett agrees with Jevons in desiring that the lines of organisation should strike vertically, not horizontally, across industry; that the new trade associations should unite, not men against masters, nor masters against men, but men and masters of a trade equally, for the common purposes of that trade. Professor Marshall has shewn—what, on reflection, must be admitted—that there is as strong a community of interest between the different members of a trade, employers and employed, as there is between the members of either of these classes in different trades. No doubt there is separation of interest also; but, in the long run, the common interests of a trade infinitely outweigh any separate or opposite interests that may exist within the trade. It is time that these interests were recognised and cared for by an organi-

sation fairly representative of the trade. More than fifty years ago the handloom weavers petitioned for the creation of such Guilds of Trade, and Henry Lytton Bulwer, M.P., in a letter to their advocate in the House of Commons, contended very forcibly that both in England and France the recent destruction of the old guilds was a purely negative policy, which required to be followed up by a reconstruction on similar, but modified, lines. Nothing, however, was done. Perhaps it was better so; better that the working class should have first established their position by their own societies, and thus secured a claim to equal consideration in any wider organisation dealing with the whole trade. But surely the time is now ripe for action.\* In a partial degree, indeed, action has already commenced. We have Conciliation Boards in many trades, committees for fixing Sliding Scales in the iron and coal trades, and a great part of the cotton industry works under Standard Lists. There have also been some notable instances of union between the masters in a trade, not to resist the demands of the employed, but to further the various interests of the trade, and in some cases to moderate the competition of individuals, and to regulate the

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\* Speaking of the United States railway service, an American economist observes, "Each year brings into greater prominence the necessity of a spirit of common action between the company and its employees. . . . It is part and parcel of the same question which presses itself more and more forcibly upon all business men as the organisation of industry becomes more and more complicated, and personal contact between the capitalist and workman ceases."—A. T. Hadley, *Railroad Transportation*, 1885, p. 128, *note*.



output. But these are only the germs of the new growth we hope soon to see.

If such trade organisations were once effectively established upon a broad and equitable basis, we can easily perceive that there are many valuable services which they might render to industry forthwith, and which are not dependent on fundamental, and probably visionary, changes in our social system. They would see to the provision of the necessary technical education and the conditions of apprenticeship. They would maintain the reputation of the products of the trade, by establishing received scales and tests of quality, by registering and guarding trade marks, and by exposing and punishing falsification.\* They would see to the development and organisation of proper markets for their goods, and eliminate unnecessary middlemen. Each trade would have its Bureau of Statistics and its Trade Journals. It should be provided with an atlas of statistics, bringing closely up to date the record of all prices affecting the trade, in a graphic and readily intelligible form, and with the necessary notes and comments on the causes and history of the price movements chronicled. Similarly, there should be a Labour Bureau, to give information and assistance to those in search of employment; and accident, thrift, and retirement funds. The determination of wages would no longer be left to the weekly uncertainties and haggling of the markets. We should have Sliding Scales and Standard Lists, and other forms of wage-contract, arranged by agreement,

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\* The master cutlers of Sheffield have done something in this direction lately.



and for long terms. As the feeling of common interests grew stronger, the employed would be more directly interested in the products of their labour ; and we might expect that profit-sharing, industrial partnerships, or whatever other system was best suited to the circumstances, would be introduced ; and the way thus paved for an advance to co-operative production. It is possible that even more than this might ultimately be secured. There might be regulation of the output, and distribution of orders, and other similar action, so as to steady prices and prevent suicidal competition. It is difficult indeed to limit the benefits which might, in the not distant future, result from organisations of this kind.

In thus attempting to promote by every means in their power the best interests of the whole body of a trade, such organisations, if confined to one country, as at first they probably would be, would certainly meet with one serious check to their success in the existence of foreign competition. Just as before the Factory Acts it was impossible for a humane employer to adopt reasonable hours of work, or dispense with cheap infant labour, so long as his baser competitors held aloof ; so under a system, however partial, of international free trade, we find that we cannot obtain such boons as comparative fixity and comfort of employment for our own people, unless similar advance is secured in some degree by their competitors abroad. But the check is not an absolute one. Much may be done before it begins to operate. And it certainly will not be a final one. The English working class will not be slow to recognise the solidarity of interest of the working classes of the civilised nations ; nor to see

the implied consequence, that they cannot adequately raise their own position without in some degree raising that of others. Any creed or no creed, all men could unite in a foreign missionary enterprise of this kind.

We must now turn for a moment to consider Publicity, the other side, as it were, of the new industrial policy. The two principles are really inseparable. Without publicity, organised action must be corrupt and inefficient ; it is the counterpart and complement of a policy of organisation. What kind of information is it we require, and what should be our channels of publication ?

We want, in the first place, the fullest information as to the transactions of all public organisations, governments, municipalities, vestries, or what not ; not excepting the trade organisations of which I have been speaking. And in particular we want the fullest records of what passes on the public markets. "So essential," says Jevons, "is a knowledge of the real state of supply and demand to the smooth procedure of trade and the real good of the community, that I conceive it would be quite legitimate to compel the publication of any requisite statistics. Secrecy can only conduce to the profit of speculators who gain from great fluctuations of prices." And after pointing out that the legislature has already recognised this principle in the cases of corn and cotton, he concludes that "publicity, whenever it can be thus enforced on markets by public authority, tends almost always to the advantage of everybody except perhaps a few speculators and financiers."\* But *every* economic

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\* *Theory of Political Economy*, 2nd edition, 1879, pp. 94, 95.

transaction in a modern society is in some degree a public one, in the sense that it affects the interests of others besides those who are the immediate parties to it. There are consequently many other kinds of returns whose publication is required. I may particularly mention statistics of employment, of income, and of consumption. As to our present statistics of employment, we have really no authoritative and representative statistics of wages, none whatever of quantity or regularity of employment ; only the vaguest indication of the numbers following the different kinds of occupations ; no returns of the amount of capital in the various industries, nor of the size of the separate concerns, and the nature of their administration. Even the statistics of the so-called public limited companies are very imperfect ; the facts of most interest are concealed. We have no statistics of income from which we can draw really accurate conclusions as to the existing distribution of wealth ; and this is particularly the case in regard to the much vexed question of landed income. Our statistics of production are tolerably full, especially in regard to those industries which are the subjects of State regulation. But for our knowledge of consumption we have nothing better than rough guesses to fall back upon, except where the facts may chance to be illustrated by the returns of taxation and foreign trade. Yet if, as Adam Smith says, "consumption is the sole end and purpose of production," it must be all-important, one would think, to have the most scientific and exact history of the varying wants of the consumer.

But amongst all the mass of returns thus indicated as desirable, there are some which are peculiarly valuable because they are the key to the rest.

There are certain great pulsations of industry which serve as a gauge of the state of the whole system, and which are in some degree trustworthy barometers of the future movements of trade. The records of these pulsations form what may be called Index Statistics, and deserve the fullest and widest publicity. Among them I may mention banking statistics, including, as of first importance, the official returns of the Bank of England ; railway and other traffic returns ; returns of exports and imports, and of revenue ; harvest and fishery and mining statistics ; statistics of the consumption of coal, iron, and building material. These statistics should be made complete and accessible ; and if necessary the returns should be made compulsory.

As to the channels of publication, we may hope that much information may in the future be obtainable through the new trade guilds, as at the present time much is furnished by the trade unions, the masters' associations, and the various trade protection societies. Many private firms also publish valuable facts in their trade circulars, which practically carry the authority of official publications. And we may fairly hope to get much insight into trade from the statistics of limited companies, when the returns are more complete ; and most of all, perhaps, especially in regard to the obscure subject of consumption, from the returns of the co-operative societies.\* We have, too, an increasingly valuable mass of facts in the various trade and financial journals,

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\* As was pointed out by the Rev. W. Cunningham, *Contemporary Review*, January 1879.

and even in the daily press. But for the bulk of the information required we shall have after all to fall back on the direct action of the State. Nowhere else can we find the wide-reaching machinery and the authoritative stamp which are necessary to give statistics their complete economic and social value. Perhaps the greatest existing monument of statistical inquiry, whether we look at the breadth of its conception, the vast area surveyed, or the immense difficulties to be surmounted, is the Industrial Domesday of the United States, the great Centenary Census of 1880, planned by General Walker. Such a work could only have been achieved by means of the resources of a highly organised Government. And if the State only is fully qualified for the collection of such statistics, it is no less clear that this work is emphatically the business of the State.\* No part of the public expenditure is so truly remunerative as that which is spent in inquiry. It results in a great economy of legislation, as well as an increase in the efficiency of legislation. If the State, instead of trying in a clumsy way to remove abuses, would content itself with publishing the facts, public opinion would often deal with them far more effectively. This is a case where, by the thorough performance of one of its functions, the State would be relieved of a great deal of work in other directions.

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\* "There is one thing Government can and ought to do, to which private enterprise is unequal. Statistics and information on all matters pertaining to agriculture in this and other countries ought to be compiled with due speed and accuracy, so that those interested may be in a position to form a better opinion on agricultural prospects."—Professor J. S. Nicholson, *Tenants' Gain not Landlords' Loss*, 1883, p. 100.

What is true of agriculture is equally true of other occupations.



I need not discuss the methods of inquiry open to the State. We all know something of the admirable commissions, temporary and permanent, which have distinguished the history of English industrial legislation; and of the invaluable Blue-Books in which the result of their investigations is preserved, forming a unique chapter in the economic history of the world. Perhaps there is still something to be desired, however, as to the form in which our reports and statistics are published. They might be more easily accessible to the people; their results, too, might be more clearly exhibited, by graphic methods and the like; and popular abstracts should be published, after the plan of Mr Chadwick's admirable Poor-Law Reports of 1834, in which the matter might be condensed, and the drift of the whole explained. Statistical publications which do very well for the experts of a bureaucracy may be utterly unsuited to the needs of a democracy. But there is every reason to believe that the authorities are alive to the public requirements in these and other respects. It is for public opinion to exert the necessary pressure on the Government, and to sanction the expense involved.

A few words on the importance of this policy of publicity. It deserves attention in the first place, in its bearing on the socialistic movements. Nothing is more conspicuous in the writings of Socialists than the looseness of their quantitative statements, as for example, in their remarks upon rent and the distribution of national income. But though exaggeration may be obvious, the absence of definite official statistics makes it difficult to prove it beyond dispute. So, again, in regard to that other common defect, their want of



scale, of a due sense of the proportion of things ; humorously illustrated in the singular importance attached by many persons to the question of perpetual pensions, and more seriously in the extravagant pictures drawn of the results which are to flow from a nationalisation of the land. These faults are not wholly attributable to individuals ; the blame must partly lie with society. The statistics are incomplete, or inaccessible, or accessible only in very misleading forms. Again, some of the strongest objections to the present order of things, brought by Socialists like Lassalle, are those which complain of the great influence of accident and "conjuncture," and the consequent prevalence of gambling speculation. Such objections assume the absence of systematic commercial statistics, and tend to lose force in proportion as such statistics are forthcoming.

Again, Socialists and progressive reformers alike have insisted on the necessity of control. But as public opinion gathers strength, it becomes evident that one of the best forms of control is that secured by publicity. The history of the English Commissions is one illustration of this truth ; and American experience seems to point in the same direction.\* The recent report of the United States Senate Select Committee on Interstate Commerce is significant of the present tendency of opinion in that eminently practical country. As the result of their analysis of

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\* "The success of commissions with little or no power to act, and simply established for the sake of securing publicity, has been, in some instances, surprisingly great. . . . Corporations are sensitive to public opinion."—A. T. Hadley, *Railroad Transportation*, pp. 136–138.

the complaints against the railroads, and the principles on which railroad charges are based, the committee put on record the following conclusions:—"First, that rigid legislation is impracticable. Secondly, that publicity is the most effective remedy for abuses of railroad power. Thirdly, that a national commission is needed to secure such publicity, and to use the necessary discretion in enforcing such laws as may be passed." It is reassuring as well as pleasant to notice that the two great Anglo-Saxon nations are proceeding so closely upon the same lines.

The fact is, that secrecy is the soil in which the worst abuses of modern society flourish. They could not bear the light of civilised opinion. Imagine the result in such cases as those of sweating, falsification, and unhealthy conditions of employment, if the law of libel permitted the publication of the facts and names, and the products were traced and identified. There is enough common humanity in the English consumer to ensure the commercial ruin of men to whom such malpractices were brought home. The fault is not with public morality. Moral opinion cannot operate till there is cognisance of the facts. Secrecy has crept into and corrupted trade, just as it has complicated and confused transactions in land. In both cases it is as foreign to old English practice as it is to natural healthy instincts.\* In this as in other matters, we are

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\* Mr Frederick Pollock, in his admirable little volume, *The Land Laws* (in the *English Citizen Series*), shews that the spirit of the old common law was that dealings in land should be open and notorious, whether by "feoffment," or by "livery of seisin." The contrary practice of secrecy was an abuse which crept in through the system of Uses. See especially pp. 100-102.

likely to revert to the more popular habits of an earlier period. The age of secrecy is gone.

It has been well remarked by a critic of Sir Henry Maine's *Popular Government*, that the essence of democracy is not so much government by the many, which is impossible, as publicity, which makes public opinion effective, and public interests supreme.\* Nothing is more certain than that, with the advance of democracy, publicity must become the order of the day. Publicity and organisation, no doubt; but publicity, I think, even more than organisation. It is the necessary protection against fraud, against falsification, against oppression; the first condition of self-help as well as of intelligent charity. It is even more indispensable as the exterminator of corruption. The danger of corruption is the peculiar weakness of popular government, as we may see from the history of the American corporations and the London vestries. It forms the stock argument brought against every proposal, however reasonable, however necessary, to extend the functions of the State. Thus Mr Giffen goes so far as to say that a modern democratic government cannot be trusted to undertake the regulation of the monetary standard; though this is of far greater social importance than the regulation, already undertaken by the State, of the standard of time. The answer to such objections, which, if admitted, would be a serious bar to social progress, seems to lie in the stringent and searching application of the principle of publicity.

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\* So the French economist, Chevalier: "Qui dit régime représentatif, dit publicité" (*Progrès de la Grande Bretagne*, Fr. trans. of Porter's well-known work, 1837, pref., p. xii.).

This partly explains the pre-eminence, for social statistics, of England and the United States.

Many circumstances have combined to weaken the force of those old feelings of commercial and corporate honour, to which men like Thomas Mun appealed so stirringly in the seventeenth century. But the same, or closely connected causes, have at the same time strengthened the force of public opinion. The corporation is dwarfed by the State; the individual is lost in the crowd, and responsibility weakened. But the crowd is becoming articulate. Its voice when expressed is certainly not wanting in power; perhaps it has more weight than its intelligence always deserves. All these considerations point to the urgent necessity of clearly instructing and fully informing general opinion. The condition of this is publicity. The sentiment of honour, formerly attached to now-vanishing superiorities of *status*, may be getting weaker. But its place can be taken, in some degree, by the pervasive and growing influence of the sort of moral fashion which now rules affairs. I hope it is not yet idle to appeal to the old romantic *noblesse oblige*. But if it ever should be, we can at any rate rely on the very effective *publicité oblige*.

In short, whatever men may think about organisation, they ought to be agreed about publicity. Those who are in favour of more organisation, must admit that without publicity organisation will inevitably become corrupt. And the advocates of *laissez faire*, to whom organisation is a red rag, must feel that such principles as those of *caveat emptor*, which are the very essence of *laissez faire*, imply that the necessary information is publicly accessible, or they would amount to the legalisation of fraud.\*

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\* Those, for instance, who regard adulteration as a legitimate form of competition, and refuse to regulate price disturbances,

But the case for both organisation and publicity is surely strong enough for those who will give it an unprejudiced consideration. The solidarity and interdependence of the modern economic world makes the old individualism an absurdity. From a modern economic point of view, there is no such thing, in strictness, as a mere individual. Market prices, wages, profits, all these are social, not individual products. Every man's economic acts more or less affect every one else; and every one is dependent on others for the means of economic action. The individual, therefore, cannot complain if he is asked to publish his transactions, or to submit them to regulations conceived in the common interest. He cannot expect to live in an elaborate modern society, reaping all the benefits of a complicated civilisation, and admitting no corresponding obligations. Not that this involves the acceptance of a communistic policy. There is no need to substitute socialism for individualism; this would but leave matters worse than before, so long as the individual remained unchanged. What is wanted is to *socialise the individual*. No means will promote this end more effectively than organisation and publicity. They stand in the first rank of social duties and socialising agents.

Why, then, the prejudice against this kind of reform? What is the secret of the persistent opposition which meets all attempts to introduce a policy thus strongly recommended? It arises to a slight extent, perhaps, from a conflict of personal interests with the

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however mischievous, must at any rate put down falsification as a crime, and furnish the fullest warnings of the irregularities they will not permit us to correct.



interests of society. There is a small class whose interests would really be adversely affected by an increase in the order and steadiness of industry; and there is a larger class who wrongly imagine themselves in the same case. There are traders who have the frankness to state openly that they live on fluctuations, and do not desire to see them diminished.\* Others, again, systematically disturb the markets, and occasionally make large fortunes by the process. These persons, however, form but a very small fraction of the commercial world, the bulk of whose profits are earned in a very different way. If their interests alone stood in the way of reform, they could be very summarily dealt with. But now-a-days it is popular prejudices rather than private interests, which alone can offer serious obstacles to any reasonable change; and we have in this case to deal with one of the most powerful and tenacious of these prejudices, the fatalistic, crude, anti-social doctrine of *laissez faire*.

I cannot stop to remind you of the history and strangely various consequences of this principle. It was the joint product of a steadily increasing egoism, fostered by the decay and corruption of the old social organisations, and of a singular philosophical confusion, long ago exposed. Nevertheless, loose and unfounded as were the assumptions on which it was based, the principle had, at the time of its greatest authority, a powerful and salutary social influence. It was necessary, perhaps, that the elaborate organisation of industry and trade handed down to us from the Middle Ages should be swept away, to make room

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\* See *The Bullionist*, Jan. 24, 1886.



for one better suited to the new economic conditions. The almost complete anarchy of individualism through which we passed in the first half of this century may have been, hideous as it was, an essential stage in the evolution of society,—the travailing which was to give birth to the new era. We may go further, and admit that the principle may be held to imply a positive truth, which is truth in all ages. Individual freedom, when it is not exercised to the injury of others, is itself a social good of the highest importance. And were individual freedom unduly fettered by public control, that “tendency to variation,” as the biologists call it, might be checked, which, in social as in organic life, is the first condition of development.

All this is true. But there is no greater mistake than to suppose that a mere negative policy of non-interference will secure general freedom to individuals. All it secures is the freedom of the strong to prey on the weak. The whole criminal law is a recognition of this fact. While, then, we must be careful that public control is not unintelligently and excessively applied, so as to destroy more freedom than it creates, it remains true that, in some form or other, reorganisation is emphatically the business of the present age, and that the strong prejudice in favour of a blind negative principle like *laissez faire* can do little but put obstructions in the way.

It will be said, perhaps, that it is idle to slay the slain, and that the rule of *laissez faire* is already a thing of the past. It is true that, as a general political theory, this principle is now somewhat out of fashion; but it has left us pernicious legacies from the time of its dominance. We have exchanged the worship of

the "natural," so characteristic of the early days of *laissez faire*, for a superstitious cult of a very inferior sort,—the worship of market price. It was first, *Vox naturæ, vox Dei!* then, *Vox mercaturæ, vox Dei!* We have deified the hagglings and accidents of trade. Every arrangement which might modify the existing conditions affecting market prices is stigmatised as "artificial," and therefore *ipso facto* mischievous and impossible. Existing market prices, perhaps, are largely the result of speculation, or of the dire necessity of certain classes of the population, or of their ignorance. The market may be "rigged," may be "cornered," may be wretchedly unstable, ill-conducted, inefficient for its true function of maintaining a steady price. On the other hand, the proposed reforms might have the effect of increasing the efficiency of the market for its true functions. Or perhaps they might aim at correcting the variations in our barbarous standard of value. It matters not to the slaves of this extraordinary fetish. All such proposals are "artificial." They cast a slight upon the sacred revelations of tape and price-list. They are condemned unheard.

Surely this is the most remarkable of the superstitions of an unsettled age. I must protest, as strongly as I can, against those who would thus cumber the path of social reform with the remains of the fallen philosophies of the past. Let us, at all events, clear the ground of this worship of haggling, and consider the reorganisation of industry on its own merits.

I return, then, in conclusion, to the contention with which I started. The precarious nature of employ-

ment is a social evil of the first magnitude, which we can and must in some degree remove. After analysing the fluctuations of price which give rise to it, we have seen that the evil is at least not beyond relief. There are many minor remedies which may be applied to the various causes of disturbance. And, underlying them all, we seem to see a general policy of industrial reform, of much wider scope than the particular subject which started our inquiry ; and by which we may be helped to secure, not merely stability of employment, but all those other changes in the condition of the people which are the main objects of social reformers. However this may be, it is clearly our duty to keep this problem of industrial stability well before our minds, and to lose no opportunity of doing something towards its solution. What, I would ask you, is the fundamental distinction between wages and salaries,—between the skilled workman with his hand and brains, and the skilled workman with his pen and brains (for brains are required in both cases),—to justify a presumption of regular employment in the one case, of uncertain employment in the other? I do not say there is none. The existence of severe competition, at home and abroad, introduces grave difficulties. But I say without hesitation that we ought not to rest content, till in one way or another we have succeeded in giving to the artisan and labourer as much social security as is commonly enjoyed by the salaried and professional classes. It will be an extremely difficult task. There is no royal road to this goal, no one simple panacea. The problem must be attacked at all points and in many ways. I have tried this evening, however imperfectly, to indicate some of

the means by which we may hope to attain success. As to the means, I may well be mistaken; but I do not think I am mistaken as to the end. It is my most rooted and settled conviction that, of all the many claims of labour, the most grave, the most pressing, and the most just, is the claim I have brought before you to-night, the claim for more regular employment.

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# ANALYSIS OF PRICE FLUCTUATIONS

Conventional Elements of Price Curves.

VariaTions Due To

## I. GENERAL PRICE MOVEMENTS.

(a) Standard of Value



(b) Credit Cycle



## II. MARKETS

Marking of Speculation



## III. CONDITIONS SPECIAL TO THE COMMODITY

(a) Production



A-B. Increasing Returns. B. Economy of the Sources. D. Speculation.

(b) Consumption



A-B. Increasing Demand (Population Growth). B. Alternative Product. D. New Market. E. Change of Habits.

Examples of Price Curves

1870 1 2 3 4 1871 1 2 3 4 1872 1 2 3 4 1873 1 2 3 4 1874 1 2 3 4

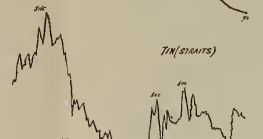
Quoted in currency of 1870-1871

120  
110  
100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0

Price per Ton



GENERAL WHOLESALE PRICES



TIN (STRAIT)



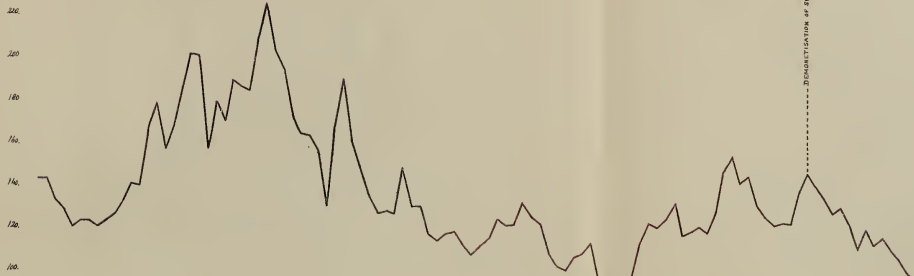
RUBBER (STRAITS)



COTTON (BULLION MARKET)

1870 1 2 3 4 1871 1 2 3 4 1872 1 2 3 4 1873 1 2 3 4 1874 1 2 3 4

1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880



CURVE OF GENERAL WHOLESALE PRICES

From 1872 to 1886

[100 = Average Prices 1875-1880 inclusive.]

1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880



